THE UNIVERSITY OF ALBERTA

DEMOGRAPHIC CHARACTERISTICS AND MOTIVATION ORIENTATION OF REGISTERED NURSES ENROLLED AS PART-TIME UNIVERSITY STUDENTS

by

© WINNIFRED C. MILLS

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "Demographic Characteristics and Motivation Orientation of Registered Nurses Enrolled as Part-Time University Students" submitted by Winnifred C. Mills in partial fulfilment of the requirements for the degree of Master of Education.

John R Eagen
Supervisor

Date June 27, 1979

ABSTRACT

This study, designed as descriptive survey, explored the demographic characteristics and motivation orientation of two groups of Registered Nurses enrolled as part-time students in two Alberta universities, one of which (Athabasca University) is organized on the open learning concept.

The literature reviewed was related to baccalaureate preparation for the Registered Nurse, practices in adult education and the concept of motivation orientation.

Data were collected from the sample group (n = 133) by means of a two-part mailed questionnaire, which consisted of a Demographic Data Profile and the Education Participation Scale. Following the descriptive statistics the two groups forming the sample were deemed to be similar. Through factor analysis and orthogonal rotation six motivational orientations were identified. Escape/Stimulation, Factor 1, emerged as the strongest motivation orientation with Social Concern the second strongest factor. Some patterns emerged among the six factor intercorrelations indicating possible unidentified, underlying psychological orientations on a life-chance/life-space continuum. The factors emerging were similar to those identified in three recent motivation studies of adult learners.

Demographic data were examined in relation to motivational factors in an effort to identify associations. A strong negative association emerged between success on RN examinations and all the motivational factors except Factor 3, Cognitive Interest, where the association was positive but weak.

Implications for program planning resulting from this study are incorporated in recommendations under four headings: Accessibility, Information Giving, Criteria for Admission and Teaching-Learning Processes.

Use of the Education Participation Scale is recommended at the time of admission to assist in the planning of individualized programs for adult learners.

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Chapter 1

STATEMENT OF THE PROBLEM AND ITS SIGNIFICANCE

INTRODUCTION

A problem exists regarding the provision of sufficient numbers of baccalaureate prepared nurses in Alberta to meet the current and expanding health care needs in this province.

Recommendations of The Report of the Alberta Task Force on Nursing Education (1975) have activated and accelerated among nurses the controversy over the need for baccalaureate preparation as the basis for professional practice. Practising nurses are not the only group debating this issue, since nurse educators and employers of nurses are also concerned. The Summary of Responses to the Alberta Task Force on Nursing Education (1978) reflects this controversy. Included in the summary are acknowledged responses from the professional nursing associations, from institutions providing baccalaureate level courses of study, from employers and consumers of nursing services and from individual nurses in all areas of practice.

The Government of Alberta has shown a reluctance to support the task-force recommendations requiring baccalaureate preparation for professional nursing practice in Alberta but has indicated support for increasing the number of nurses having a baccalaureate degree in relation to the number of diploma-prepared nurses (Position Paper on Nursing Education: Principles and Issues, 1977).

Despite the lack of strong government support for baccalaureate level nursing education as a requirement for practice, many diploma program graduates with academic and employment aspirations beyond their present level of preparation are seeking admission to post-RN baccalaureate programs.

A quota has existed in the post-RN baccalaureate program at the University of Alberta for five years. As a result, 72 post-RN students can be accommodated annually in the present program. Qualified students who have not been accepted into the post-RN baccalaureate program, or those who are unable to undertake full-time study, may choose to enroll as Special Students in the Faculty of Nursing at the University of Alberta, although such Special Students may not enroll in nursing courses.

With only two programs existing in Alberta to prepare nurses at the baccalaureate level, and considering the number of nurses seeking baccalaureate preparation, Athabasca University, in co-operation with the Faculty of Nursing, University of Alberta has attempted to accommodate the learning aspirations of some Registered Nurse students through its individualized study programs. The flexible programming made possible by Athabasca University assists Registered Nurses to study on a part-time basis. In this way they can meet prerequisite requirements of the University of Alberta Faculty of Nursing baccalaureate program, and, additionally, can take some options which will be accepted for credit upon admission to a post-RN baccalaureate program. It can be anticipated that, as the co-operative ventures progress, Athabasca courses will make possible

the completion of some non-nursing support courses, established as part of the post-RN curriculum at University of Alberta.

Athabasca University makes courses available to all age groups of learners from varying educational backgrounds. Registered Nurses, enrolled as part-time university students either at Athabasca University or University of Alberta, span the age range from 21 years to 50 plus years. These nurses constitute a substantial group of adult learners about whom little is presently known. The literature of Androgogy stresses the importance of identifying learner characteristics and needs, and the importance of developing programs compatible with the needs and motives of participants (Knowles, 1970).

Motivation for participation in general adult education programs has been researched actively since 1961, with early studies examining the relationship of socio-economic and demographic factors to participation (Johnstone and Rivera, 1965) while more recent work examines the psychological motivation underlying participation in continuing learning endeavors (Boshier, 1977).

The University of Alberta Faculty of Nursing recognizes the need to respond to an increasing number of applicants and further recognizes that a pool of potential baccalaureate program candidates exists among the Special Student group registered with the Faculty of Nursing. This pool may also include individuals from within the group of Registered Nurses enrolled at Athabasca University as part-time students.

From an administrative point of view, and in the light of the Faculty's recognition of need, courses can be made more accessible and relevant when the needs of the learners are known and considered.

Program planning is more successful when potential learners are identified and when the characteristics of these learners are known (Cross and Jones, 1972).

It is the purpose of this study to determine some of the characteristics of the individuals in this potential student pool and their beliefs regarding the value of baccalaureate education to themselves and to the nursing profession. An attempt has been made to determine their motivation for pursuing baccalaureate work and to identify correlations that exist between the demographic characteristics and the motivational factors discovered. Relationships discovered may then assist in ongoing course planning and the establishment of future policies guiding program development by both University of Alberta Faculty of Nursing and Athabasca University.

STATEMENT OF THE PROBLEM

Numbers of Registered Nurses are included among students enrolled in Alberta universities on a part-time basis. Two known groups of these Registered Nurses are:

(a) Registered Nurses enrolled as Special Students, University of Alberta, Faculty of Nursing

(b) Registered Nurses enrolled at Athabasca University in one or more courses.

Through analysis of data obtained by survey questionnaire, this study proposes to answer the following questions concerning each of the two groups of learners:

1. What are some selected characteristics of the Registered Nurses enrolled in part-time study?

   1.1 demographic characteristics
   1.2 professional characteristics
   1.3 academic characteristics

2. What are the academic aspirations of these students?

   2.1 immediate aspirations
   2.2 mid-range aspirations (1 year to 3 years)
   2.3 long range aspirations (beyond 3 years)

3. What motivated these Registered Nurses to enroll in part-time university course work?

   3.1 what do they see as the major outcome for them of having a baccalaureate degree
   3.2 what do they believe about the need to have a baccalaureate degree
   3.3 how do these Registered Nurses compare with other adult learners in terms of factors demonstrating motivation orientation as identified by the Education Participation Scale?

4. What relationships exist between the responses on selected variables of the Demographic Data Profile and selected variables on the Education Participation Scale for these Registered Nurses?

SIGNIFICANCE OF THE STUDY

Two recommendations of the Alberta Task Force on Nursing Education (1975:114) state:

> That by 1985 there be two routes to professional nursing preparation: (1) a university-based baccalaureate program, and (2) an articulated baccalaureate program between a non-university setting and a university setting.
>
> That by 1990 the minimum educational preparation for professional nursing be the baccalaureate, whatever route to the degree is chosen.

The Government of Alberta, in its Position Paper on Nursing Education: Principles and Issues (1977:6) indicated reluctance to make the baccalaureate degree mandatory, but recognized the

desirability of baccalaureate preparation for an increased number of practising nurses. Registration figures show 1,375 nurses (9 percent) actively registered in Alberta hold a baccalaureate or higher degree (AARN, April, 1979).

Employers in Zelmer's study (1979) indicated that in 27 Alberta health care agencies, a total of 1,456 positions exist where a baccalaureate degree is either necessary or preferred.

Registered Nurses are enrolled in substantial numbers in Alberta universities on a part-time basis. Those who are enrolled at University of Alberta and Athabasca University form a potential pool of applicants for full-time study towards a post-RN degree in Nursing in either of the two programs which presently exist in Alberta to meet this need (University of Alberta and University of Calgary). Data related to the characteristics of these students have not been categorized nor analyzed. Their motivation and their aspirations are not known.

Specific criteria exist for admission to the BScN program at the University of Alberta. With a quota in effect for the post-RN program and more applicants annually than can presently be accommodated, pressure is being exerted for increased admissions to the program from this potential pool of students, about whom little is presently known. Morstain and Smart (1977) emphasize the need for further research related to the orientation of adult learners: "most institutions have very little empirical information on reasons underlying adult learners' decisions to enroll in educational activities" (p. 666). The literature on the motivation orientation of adult learners indicates that no definitive typology has been established.

The presence of underlying psychological factors, evidenced by the clusters of reasons for enrollment, is postulated. Replicative efforts have been recommended by Morstain and Smart (1974:97; 1977:676) and Boshier, 1977:113).

The Registered Nurses in this study have provided data which, when analyzed, should enhance our knowledge of adult learners and facilitate course planning and program development in post-RN baccalaureate programs as well as administrative decisions regarding enrollment.

DEFINITION OF TERMS

Post-Basic Program for Registered Nurses: The aim of the program is to prepare students for positions in community health agencies such as hospitals, voluntary and official health agencies and schools of nursing. The students will be granted five years from the time of admission to the Nursing courses to complete requirements for the degree. One year as a full-time intramural student at the University of Alberta Faculty of Nursing is required. (Faculty of Nursing Calendar, 1978/79, Sec. 131.2.3(2))

Post-RN Program: The name of the baccalaureate program for Registered Nurses was officially changed from Post Basic Program to Post-RN Program in March, 1979. (Minutes, Executive Committee, Faculty of Nursing, March 19, 1979)

Quota or Limitation on Enrollment: Enrollment is limited by quota, preference being given to applicants with at least one year of

graduate nursing experience, and who have submitted applications and all required documentation before May 15th. (General Calendar, University of Alberta, Section 13.1.3 and Section 13.14.2)

Registered Nurse: In Alberta, a Registered Nurse is a graduate from an approved school of nursing who holds Active Membership in the Alberta Association of Registered Nurses. (Royal Statutes of Alberta, 1955, c.283, s.5; 1960, c.89, s.3; 1966, c.87, s.3)

Special Students at the University of Alberta: are those who have been permitted to register in one or more courses, but not officially for credit towards a degree or diploma at this or any other institution. (General Calendar, University of Alberta, Section 12.2.3)

DELIMITATIONS

Time Parameter

The time period chosen within which students' enrollments occurring would be included in this study was July 1, 1977 to June 30, 1978, in accordance with the University of Alberta academic year.

Subjects

Only those Registered Nurses enrolled in university courses on a part-time basis who do not presently have a baccalaureate degree in nursing were included in this study because data related to the characteristics of this group of adult learners have not been categorized nor analyzed. There is both an administrative and a professional need to know more about the nature of these learners.

Exclusion of Male Respondents

Only four male respondents returned questionnaires. Of this number, two already held a baccalaureate degree (non-nursing), and one indicated no interest in obtaining a baccalaureate degree. Since the number of male respondents was very small, with only two usable questionnaires, these were eliminated from the sample since differing male-female motivation could contribute to a non-homogenous sample.

LIMITATIONS

Time Parameter

The period for including enrollments in the study was established as July 1, 1977 to June 30, 1978, corresponding to the University of Alberta academic year. Data from Athabasca University did not conveniently fit this structure. Students at Athabasca University may enroll and complete courses on personalized rather than institutional schedules. Numbers of Registered Nurses might have been enrolled at Athabasca University prior to July 1, 1977 and continued as students throughout the period of the study but not have been included in the sample population.

Demographic Data Profile

This instrument was developed for this study, and although it was patterned after similar instruments and a pilot study done, reliability and validity can not be assured.

Chapter 2

REVIEW OF RELATED LITERATURE AND RESEARCH

SOME ASPECTS OF ADULT EDUCATION

Participants in Adult Education

A discussion of adult education must address the question—when is an individual considered to be an adult? In Western society, "coming of age" is not clearly defined but more loosely associated with acceptance of legal responsibility for actions and certain rights, e.g., the right to vote. Funk and Wagnalls' dictionary (1978:26) speaks of "the time of life marked by maturity and discretion; adulthood; especially, that age when full civil rights or certain personal rights can be legally exercised, usually 18 or 21 years: chiefly in the phrases of age, underage: also called legal age."

In their landmark study of adult education, Johnstone and Rivera (1965:31) defined an adult as "anyone either twenty-one or over, or married, or the head of a household." Houle (1970:127-152) reviewing the thinking about stages in the span of life, has derived (from theories espoused by Buhler, Erikson, Jung, Peck and Havinghurst), an adult life-cycle model related to educational interests. He believes that the span of time from age 18 to 22 years constitutes a bridging period between schooling and entry into the world of work during which time the individual learns to accept himself as a responsible adult. In Western society, this bridging period has also

been characteristically the time for the individual's exploration of traditional forms of post-secondary education, i.e , technical school, college and university (Horstain and Smart, 1977:666). Sheehy's discussion of the "Trying Twenties" (1976) extends the period somewhat, based on her statement that:

> Given the permissiveness to experiment, the prolonged schooling available, and the moratoria allowed, it is not unusual for an adventurer to be nearly 30 before firmly setting a course. (p. 121)

In Houle's view, young adulthood begins about age 22 and continues for about 15 years. Educational interests during this time are related to one or more of the three dominant social concerns of young adults: courtship, establishing a home, an occupation or a career, and a place in a community. Sheehy refers to this period in the thirties as one of "rooting and extending" (p. 213).

Early middle age spans the years 35 to 40 plus and in Houle's view constitutes a period of unrest—"the adolescence of adulthood"—during which the individual may feel the need for a new pattern of life, and educational pursuits to achieve the goal. The unrest resolves into greater clarity of purpose in later middle age as the individual comes to terms with the realities of his life and learning is pursued more for its personal and social interests than for job-related goals.

In the period beyond middle age, educational pursuits tend to span a wide variety of interest areas and to provide needed opportunity for continuing social contacts, as occupational demands lessen and retirement occurs.

A general 'overview' statement made by Johnstone and Rivera

in 1965 provides the following social profile:

> The adult education participant is just as often a woman as a man, is typically under forty, has completed high-school or more, enjoys an above-average income, works full-time and most often in a white-collar occupation, is married and has children and lives in an urban area . . . (p. 8)

Based on discussion and definitions in the foregoing literature, Registered Nurses enrolled as part-time university students can be considered to be adult learners.

Current research in the field of adult education tends to place less emphasis on the use of demographic variables as determinants of adult educational interests and more emphasis on determining why adults participate in continuing learning activities (Morstain and Smart, 1977:667-668). Both selected demographic and motivational aspects of Registered Nurses as learners will be considered in this study.

Adult Education Defined

A definition offered by a foremost Canadian adult educator, Coolie Verner (1970:6) states:

> Adult education is a relationship between an educational agent and a learner in which the agent selects, arranges and continuously directs a sequence of progressive tasks that provide systematic experiences to achieve learning for those whose participation in such activities is subsidiary and supplemental to a primary productive role in society.

An early user in North America of the term androgogy, Knowles (1970:22) has described adult education as a mission, committed to action towards three specific targets in society: "(1) the needs and goals of individuals, (2) the needs and goals of institutions, and (3) the needs and goals of society."

Discussions involving definitions of adult education are characterized by divergence of opinion (Kurland, 1976). Concepts range from the belief that adult education is essentially a catch-up activity designed for the disadvantaged who for one reason or another were unable to progress in their youth through the 'normal' system of schooling, to the belief that adult education encompasses all forms of education for learners beyond legal school-leaving age. In the latter context, adult education becomes but one facet of a system of lifelong learning or l'education permanente espoused by UNESCO and discussed in Learning to Be (1972).

Niemi (1974) has said "Perhaps the greatest barrier to an appreciation of the concept of lifelong learning is the tendency among adults to confuse learning with schooling and reject both" (p. 249). Niemi further emphasizes the need for a concept of continuity in learning that precludes the notion of education being something that the adult has had—our society is to some extent still imbued with the idea of the individual 'finishing' school or 'finishing university' according to a traditional chronological scheme (p. 250).

Clark and Dickinson (1975:3-15) believe that continuing or adult education involves learning that is conducted in the presence of someone external to the learner who plans and manages the learning process. Adult education is predominantly a group activity in contrast to self-education which is an individual and private pursuit.

Rockhill (1976:199) pursues this thinking in an historical overview and holds that forms of adult education have been part of all organized societies. Traditional emphasis on schooling, to which we

are still much beholden in North American society, designated formal educational processes and institutions for the provision of education to specific groups, and equated education with narrowly sequenced content in credentialling-oriented, elitist institutions. Her definition of adult education is symbolized by the acronym SALE—Systematic Adult Learning Experience.

Part-Time Students

Kurland (1976:279) notes that while students in the post-secondary educational stream are beyond the age of compulsory schooling, and therefore adults, persons in the traditionally sequenced stream of education (K to 12 followed by post-secondary education) are usually excluded from the definition of adult learners. They come to be categorized instead either as 'regular' students, or, in the words of an OISE study (1975:3) as "part-time . . . a giant category of all the miscellaneous irregulars."

The group of Registered Nurses under study falls into this part-time category. The Ontario study refers to part-timers as "the tenacious but long-neglected night fighters" (p. 1) and suggests that institutional attitudes towards part-timers as second-rate learners influences institutional policies towards inadequate provision of teachers, services and sound educational schemes. It can be conjectured that economics and declining post-secondary enrollments could dictate change where per-capita funding exists as an incentive for encouraging part-time enrollment.

A trend towards increasing part-time enrollment was noted by Munroe (1973:72-77) and more recently by Humphrey and Porter (1978:6).

Significant in each study was the rapidly increasing percentage of female students. In the United States, approximately half of the learners in post-secondary institutions are studying on a part-time basis (Kurland, 1976:279). This is referred to by Harrington (1977: 242) as the adult education revolution. That governments recognize the implications for change in education is reflected in the studies completed in at least two Canadian provinces. In Ontario, the Report of the Commission on Postsecondary Education (1972) evidenced concern; while in Alberta the Report of the Commission on Educational Planning in the Province of Alberta (Worth Report, 1972) supported and encouraged the principle of lifelong learning. On an international level, the initial thrust of the Faure Report (Learning to Be) was carried further in 1976 by UNESCO's Recommendation on the Development of Adult Education which defined adult education in the broadest possible sense and formed the basis for discussions held under the auspices of the Canadian Association for Adult Education. With the passage of the U.S. Bill on Lifelong Learning—"The Mondale Bill" (1976)—impetus was provided for furthering the cause of all adult learning modes in the United States. While the concept of lifelong learning is becoming better understood and more accepted in North American society, the reality of economic retrenchment in the late seventies and its implications for education are evident. Paid leave for workers to participate in continuing education, though espoused by the International Labor Organization (OECD, 1975:34), is not yet a recognized part of most collective agreements and financial assistance to the part-time student remains difficult to access.

Needs of Part-Time Adult Students

An OISE study, Part-Time Study: The Student and the Method (1975), reviewed Ontario post-secondary institutions and noted a trend towards administrative integration of day and evening part-time and full-time registrants, allowing all students to take classes when convenient:

> Universities that are integrated—to the extent that full-time and part-time students take courses together as they wish—feel that the "university atmosphere" thus extends to the part-time students. . . . just how much "atmosphere" one can soak up depends upon the time a student is able to spend on campus and his attitude while he is there. (p. 28)

The residency requirement (full-time for final year) still exists in some universities. It is noted that careful scrutiny of calendars is necessary in order to discern exact requirements and even then some information is obscure (pp. 25 and 27).

Skelhorne (1975:31-37) makes a poignant plea, based on personal experiences as a mature student, for change in institutional attitudes towards the mature adult learner. A place for socialization on campus, androgogy versus pedagogy, greater consideration for the "consumer" of educational services through improved counselling and information systems, humanistic approaches and financial consideration in the levying of certain fees (e.g., social, athletic) all emerge as areas for administrative consideration. That there may be gaps between government policy, institutional policy and reality related to access and program flexibility is documented in the OISE study (1975:32). Kurland (1976:254-262) notes need for change in ideas about credentialling, financing, release time from employment and educational counselling as major areas in which innovative projects could be useful.

Hiemstra (1976:39), following the ideas of Skelhorne and Kurland, refers to needed changes in the teaching-learning process

involving mature adults. He believes that there is a need for experienced teachers of adults who will make their career in this field. It is necessary, he feels, that the teacher of adults be familiar with the uniqueness of the mature learner, and further, that the teacher see himself as a facilitator, counsellor and colleague. In order to be successful in the role of teacher of adults, the teacher must rethink his educational role and find satisfaction in ways other than the traditional feedback from a large class of students.

At the University of Alberta, Registered Nurses in Hayes' study (1976) who did not accept full-time places in the baccalaureate program to which they had been admitted, cited financial difficulties and potential job insecurity as reasons for not attending university. In 1978, Andrews' study on educational needs of Registered Nurses in Alberta reiterated the same concerns: 15.6 percent indicated that funding was a problem and for 9.4 percent the loss of their present position was a deterrent factor.

Humphreys and Porter in their 1978 study of part-time Carleton registrants sum up the problems of the part-time learner thusly:

> Once individuals enroll in a program of part-time university studies, the data indicate that access to programs, courses and facilities within the university is limited. These limitations arise primarily because of institutional decisions, made by default rather than by design, about residency requirements, time scheduling, course rotation and hours of operation of facilities and services. The consequence is that part-time students are able to participate to a much lesser extent than full-time students in directing their educational experience. Although the part-time students expressed considerable dissatisfaction with the range of programs and courses available to them, their political marginality within the University or student organizations is such that the expression of their dissatisfaction is rarely articulated and, if it is, it is not easily heard. (p. 129)

Within the existing structure of the post-RN program, limitations similar to those identified by Humphrey and Porter exist for Registered Nurses enrolled as part-time students at the University

of Alberta. The problems are accentuated for those who live outside Edmonton city or for those who work and seek to study in "off-duty" hours, particularly those who work rotating shifts.

Efforts have been initiated to alleviate some of these problems. Athabasca University offers flexibility of programming to Registered Nurses who wish to enroll in courses which can be accepted as credit electives in the baccalaureate program by the Faculty of Nursing, University of Alberta. Co-operative planning between Athabasca University and University of Alberta Faculty of Nursing is being directed towards making available through Athabasca University support courses required for credit in the baccalaureate program. Core nursing courses, however, are not available through Athabasca University.

BACCALAUREATE EDUCATION FOR THE PRACTICE OF NURSING

Historic Background

University preparation for the practice of nursing is not a new concept. In Canada, in 1919, the University of British Columbia pioneered a course of instruction for nurses leading to a degree, the first university in the British Empire to offer such a program. Throughout the nineteen-twenties at least five other Canadian universities mounted similar programs, including the University of Alberta, where a baccalaureate program was inaugurated in 1923 (Gibbon, 1947: 380). These programs typically included two or more years of traditional hospital training often "sandwiched" in between the university years, with the final year offering special emphasis on teaching, supervision or public health.

Today, there are 22 baccalaureate programs operating in Canada with an enrollment of 5,797 students. Included among this number are

1,402 Registered Nurses, representing 24 percent of the total. Full-time RN students total 15 percent while the other 9 percent are part-time students (CAUSN, 1977).

In the United States, university education for nurses began somewhat earlier than Canada, in 1899, with a program in Hospital Economics for graduate nurses at Teachers College, Columbia University. By 1916, five-year "sandwich" programs were underway in several universities, rewarding successful students with a baccalaureate degree (Watson, 1977:35). Some 50 years later, in 1965, the American Nurses Association position statement declared that education for nursing should take place in institutions of higher learning and that two levels in nursing—a technical practitioner and a professional practitioner—should be prepared. Baccalaureate education was stipulated as the preparation for professional practice and associate degree level preparation for technical nursing practice. No mention was made in the statement about hospital diploma programs since these do not exist within the framework of higher education (ANA, 1965).

Change in Nurse Education Programs in Canada

Though not suggesting preparation for nurses at baccalaureate level, the Weir report of 1932 in Canada did recommend the incorporation of nursing education within an educational stream (Weir, 1932). Both the Canadian Nurses Association and the Alberta Association of Registered Nurses have encouraged innovation and spoken forcefully against apprenticeship type programs throughout the past fifteen years (Mussallem, 1964; AARN, 1962, 1970, 1972, 1976, 1978). The statement of 1962 made clear the position of the Alberta professional association, 30 years after the Weir Report:

> There should be two well-defined categories of nurses prepared to function as first-level practitioners of nursing . . . One category of practitioner is prepared in a program leading to diploma in nursing, conducted in educational institutions such as colleges and community colleges, and the other is prepared in a university program leading to a baccalaureate degree. (AARN, 1962:14)

Ten years later, when the concept of lifelong learning was appearing in educational literature, the association reiterated its view (AARN, 1972:12).

The development of the junior and community college system in the provinces of Canada has paralleled the growth of this movement in the United States. Diploma nursing programs in these colleges have replaced hospital schools in some provinces (e.g., Ontario) and merely added to the complexity of nurse education in others (e.g., Alberta) where hospital diploma schools continue to function, bringing to three the program levels for preparation of Registered Nurses. Confusion reigns in the minds of the public, our legislative bodies, and in the minds of rank and file nurses prepared at diploma levels who are working hard, most often in institutional settings, at the everyday business of nursing. For the majority of these nurses, trained in hospital diploma programs, their education has produced a mind-set towards compliance and passivity. Discussion of issues and statements made on their behalf by the professional association are ignored or poorly understood, despite association efforts to motivate the membership towards participation. No less a problem exists in the United States (Hillsmith, 1978:99).

The Degree Dilemma of the Seventies and Beyond

Following the publication of the Report of the Alberta Task Force on Nursing Education, in 1975, the level of awareness has increased somewhat among practising nurses in Alberta, concerning current dilemmas in nursing education. From the United States, Lewis (1977:369) notes that over the past decade the degree has come to be something that almost every nurse wants to have "either as a mark of professional status, the route to advancement or a better salary, or because it just might become a requirement for registered nurse licensure one of these days." Indeed, such legislation has been introduced in the State of New York and was recommended for Alberta for 1990 (Task Force Report, 1975:76).

Squaires and Hinsvark, in a Special Project at the University of Wisconsin-Milwaukee School of Nursing, 1972-73, studied the plight of the Registered Nurse seeking to continue her education towards the baccalaureate degree. Three groups of Registered Nurses were included in the study: RN's who were enrolled in or had completed a baccalaureate program; RN's who had registered for further education and interrupted or discontinued their studies; and RN's in the community who were considering the possibility of baccalaureate education. A condensed report of their findings (Squaires and Hinsvark, 1975:43-47) indicated:

> The RN student is a relatively young recent graduate of a diploma program who is anxious to complete her baccalaureate work to ensure her professional future and opportunities for advancement. She brings to the school clinical expertise which exceeds the levels of competence expected of the basic undergraduate student. She is motivated to learn and enters with clear objectives, both of which are rare in the basic undergraduate. In some cases she may be an older person with a

> history of successful supervisory, administrative or teaching experience as well. These characteristics and background suggest that she should be treated as an adult learner and given maximum opportunity for independent study. (p. 46)

Obstacles experienced by such students wishing to complete a baccalaureate degree included: length of the course, cost (tuition plus lost wages), inconvenient (rigid) scheduling of classes, university complexity, lack of adequate counselling, family obligations, previous training and experience not credited, feelings of depreciation.

Recommendations emerging from the study (which included responses to questionnaires, discussion groups and student suggestions) included:

1. establishing a counselling program directed towards a complete assessment of the individual's capabilities, as well as assisting the RN to define her goals as a step towards designing an individual curriculum and independent learning modules.

2. implementation of measurement tools (e.g., College Level Examination program) to assess levels of professional achievement and academic readiness to avoid needless repetition of content.

3. implementation of alternative examination and assessment tools to measure clinical knowledge and competency for credit. Joint appointments with clinical faculty would facilitate this recommendation.

4. alternative curriculum requirements and degree paths.

Andrews' study of Alberta Registered Nurses (1978:61) identified a list of obstacles to obtaining a baccalaureate degree similar to those described by Squaires and Hinsvark.

Alternative programming to allow more nurses to qualify for the baccalaureate degree does not, however, ameliorate the growing rift between levels of practitioners. Sheahan (1973: 440-444), discussing the professional-technical dichotomy, states that without clearly defined differences in practice, different levels of education are not justified. McClure (1976) on the other hand, resists a dichotomous model, and prefers to conceptualize technical nursing as an integral part of nursing per se. Because of the individual nature of patient needs, technical tasks might be best carried out by the professional, or in circumstances judged appropriate by the professional, delegated to the second level practitioner. Lewis speaks unhappily of professional ambivalence, evidenced by our failure to act in a concerted way to demonstrate why the degree is important and then implement our beliefs. Hillsmith (1978:100) defines the ambivalence in a different way—the insistence that one is a professional, while at the same time pursuing the degree which labels one a professional! Such occurred in responses to a questionnaire used in her study of Registered Nurses returning to school:

> These nurses have considered nursing per se to be a profession; they felt that when they became RNs by whatever route, they had indeed become "professional"; and it is obvious from their answers that the majority continue to think of themselves as "professional" now. At the same time, they accepted the reality of the BSN as the basic nursing credential—enough to apply to college, take challenge exams, and acquiesce in the discipline of a program which states plainly enough that only at the end of the course is one a "professional." Intellectually, these nurses have accepted the BSN; emotionally, they have not. (p. 101)

Hassenplug (1977:438) puts forth an impassioned plea for

change through unified action. Speaking at a National League for Nursing convention she emphasized the great need for nursing administrators and nursing educators to work together to discern the needs for nursing within a changing health care delivery system, and to recognize the potential political clout of a unified body of nurses speaking for nursing.

Sovie (1978:373), projecting ideas for the future of nursing, identifies trends illustrative of an emerging profession: convergence in knowledge base and standards of practice, differentiation and specialization, bureaucratization and increasing rigidity in regard to career alternatives. According to Schein (1972:43) these trends are evidence of a maturing profession. Wooley (1978:103-108) suggests that faculty in post-RN programs have a responsibility to facilitate resocialization of the learner, since she sees such resocialization as the necessary key to helping the RN to internalize the professional role. Epstein (1977:73) emphasizes the critical nature of the faculty or change-agent's role in influencing behavior. If internalization of values is the goal, then the leader must possess credibility in the eyes of the student. Certainly one way to accomplish this is to involve more nursing practice and administrative personnel in the educational socialization process, as suggested by both Hassenplug and Wooley. It is regrettable that in the majority of our institutional settings in Alberta, including large city hospitals, the majority of nurses in nursing administrative positions lack adequate preparation for their jobs. There is a great need for nurses prepared at the baccalaureate level in Alberta to fill these positions, in addition

to positions in the more 'traditional' fields thought appropriate for baccalaureate prepared nurses—i.e., public health and nursing education. In a recent review of the "employability" situation for baccalaureate nurses in Alberta, Zelmer (1979) determined, from responses of employers, that in ten active treatment hospitals responding there were 225 positions requiring at least baccalaureate preparation and 605 positions for which such preparation was preferred. Other institutions and health agencies responding (17 in number) indicated another 202 positions requiring a baccalaureate degree or higher and 424 positions for which such preparation was desired.

While employers are beginning to recognize the advantages of the baccalaureate nurse for 'leadership' positions, it will be up to nursing service administrators to document the improvements in patient care that can and do accrue when staff nurses are prepared at baccalaureate level. This can be a difficult task for the administrator who may herself be prepared only at the diploma level of nursing.

The International Labor Organization has spoken to the need for paid educational leave for workers (OECD, 1975:34) and both nurses and their employers must negotiate strategies which will facilitate the upgrading necessary to meet the increasing demands of professional practice.

To the universities falls the crucial task of preparing the increasing number of baccalaureate graduates needed to provide services to our Alberta health care clientele. As long as diploma programs for the beginning level of nursing practice are encouraged by

government policy there will be a continuing need for post-RN programs to meet the adult learners' needs for professional education. Substantial increases in resources together with innovative planning will be required to facilitate the development and administration of expanded post-RN programs.

MOTIVATION ORIENTATION OF ADULT LEARNERS

Introduction

Knowles (1970:79) has said that adult education programs should be planned with the needs of the learners in mind and efforts should be directed towards meeting those needs.

Tough (1978) tells us that adults motivated to learn are astute in discerning their own learning needs. It is not unusual for an individual to devote 500 hours to self-defined learning needs in a year, completing up to five distinct learning projects. A learning project is a "highly deliberate effort to gain and retain certain definite knowledge and skill or to change in some other way" (Tough, 1978:2). That the adult is capable of directing his own learning is clear (Tough, 1971, 1977; Knowles, 1973). The path which that learning takes has psychological underpinnings which may be related to such widely varying needs as job requirements, peer group activity or professional beliefs and commitments. Knowles (1970:86) defines an educational need as "the discrepancy between what an individual (or organization or society) wants himself to be and what he is; the distance between an aspiration and a reality."

Toffler (1970) has discussed the knowledge explosion and

its implications for society. In the health care field, professionals experience pressure to keep up-to-date. Registered Nurses experience this need in the course of their everyday practice at the bedside as new drugs, new treatments and new technologies appear. New nursing knowledge is developed and applied slowly (O'Connel and Duffey, 1978: 162, 170; Ketefian, 1975:89-92). This may be due, in part, to the paucity of practice-oriented research, as well as to the limited dissemination of research findings where large numbers of nurses in both the education and practice field tend to be technically rather than professionally oriented (Chaska, 1978:419). Developments in other disciplines peripheral to, but applicable within the field of nursing, i.e., the social, behavioral and physical sciences, represent concomitants of change poorly understood by many practicing nurses (Reeder, 1978:237). Leininger (1978:380) states that to be viable, to be relevant and to survive, any profession must be futuristic in its orientations and goals.

Zelmer's 1979 survey identifies the need in Alberta for substantial numbers of graduates prepared at baccalaureate level. Further consideration must, therefore, be directed by professional nurse educators in Alberta, to future needs in the face of an expanding population and increasing demand for health care services.

Considerable interest on the part of Registered Nurses in upgrading to baccalaureate level preparation exists in Alberta at the present time, as evidenced by the number of applicants to post-RN baccalaureate programs. It will be desirable to foster and maintain this motivation among other Registered Nurses in order to increase our

numbers of baccalaureate graduates to needed levels. If their needs are known and their motivation orientation identified we will be better able to supply compatible programs and "to create learning environments congruent with the needs, expectations and learning styles of adults" (Boshier, 1976:24).

The third part of this chapter examines the literature of motivation orientation.

Development of Motivation Orientation Research

For over 20 years interest has been evidenced in the motivational orientation of adult education participants. A variety of different techniques, useful in determining the individual's reasons for participation in educational projects, include interviews, questionnaires, open-ended sentences and checklists (Knowles, 1970:91-102). Problems are inherent in any method of data collection and though respondents may be very certain about what they wish to learn, they may be less able to clearly establish why they wish to learn. Replication of studies is difficult where inferences are drawn from open-ended sentence completions or interview statements and problems exist in the categorization of responses to open-ended questions, making reliability difficult to achieve.

In an early exploration of motivation, Houle (1961), reporting on interviews conducted with 21 continuing learners, determined that all of them had goals for learning, though they differed individually in their reasons for participation. On the basis of their stated reasons he categorized these learners into three groups, namely, the goal-oriented (who had a definite direction and purpose in their

learning), the activity-oriented (who enjoyed the learning experience apart from its content or purpose), and the learning-oriented (who were seekers of knowledge for its own sake).

A national sample survey of adult learners conducted in the United States by the National Opinion Research Centre (Johnson and Rivera, 1965), constitutes a comprehensive examination of the field of adult education in the early sixties including attitudes and opinions held by adults concerning education. Participants in the study responded at interview to a questionnaire. Johnson and Rivera state:

> The main things people remembered about how they first came to enroll in courses, then, were preparation for new jobs, advancement in present jobs, relationships with other people and changes in the status or composition of their families. (Johnson and Rivera, 1965:10)

Age played a factor in respondents' motivation since job-centered reasons influenced younger adults towards participation in courses while older adults enrolled for general knowledge. Years of formal schooling related strongly to whether persons evidenced interest in further education. Those with more formal schooling were more likely to enroll in adult education courses.

Morstain and Smart (1977:667,668) discuss the limitations of this research format where the dependent variable—reason for participation in adult education—is related to demographically constructed groups, e.g., age ranges. It is suggested that this approach limits the possible emergence of motivational patterns from a diverse group of adult learners.

Development of Instruments to Identify Motivation Orientation

Houle's three categories of learners, the goal oriented, the activity oriented and the learning oriented, constituted a typology of learning orientation subject to further investigation. At least three instruments have been devised by researchers towards this end: The Continuing Learning Orientation Index (Sheffield, 1964); the Education Participation Scale (Boshier, 1971) and the Reasons for Educational Participation (Burgess, 1971). Factor analysis techniques have been applied to data from studies using these instruments to isolate factors representative of motivation orientation in different populations.

Factor Analytic Studies of Motivation Orientation

Sheffield (1964) prepared his 58 item questionnaire—the Continuing Learning Orientation Index—based on Houle's work and used it in a study of 453 adult education participants in 20 continuing education conferences in the United States. Respondents answered the questionnaire on a five-point scale ("very frequently important for me . . . never important for me") indicating how each of the reasons influenced their participation. From the analysis Sheffield produced five factors which he termed orientations:

1. learning orientation—seeking knowledge for its own sake;
2. desire-activity orientation—taking part because in the circumstances of the learning an inter-personal or social meaning is found which have no necessary connection, and often no connection at all, with the content or announced

purpose of the activity;

3. personal-goal orientation—participation in education to accomplish fairly clear-cut personal objectives;
4. societal-goal orientation—participating in education to accomplish clear-cut social or community objectives; and
5. need-activity orientation—taking part because in the circumstances of learning an introspective or intro-personal meaning is found which may have no necessary connection, and often no connection at all, with the context or announced purpose of the activity (Sheffield, 1964:1-22).

Boshier (1971), working in New Zealand, re-examined and refined the work of Houle and Sheffield and developed the Education Participation Scale (EPS) consisting of 48 items used to elicit from individuals their reasons for participating in adult education activities. Item reliability estimates (test re-test co-efficients) were based on responses of 20 individuals not in the primary sample. His study included 233 Wellington adults involved in non-credit courses offered by the High School, University Extension and Workers' Educational Association. Courses included foreign languages, Art, History, Cookery, Car Maintenance, Child Development, Astronomy, etc.

Responses were checked on a nine-point scale (very much influence . . . very little influence). The "very much influence" category was varied systematically from left hand to right hand position on the page, and high-loading factor items were randomized throughout the instrument. This format attempted to eliminate

acquiescence, response and positional bias which Boshier felt were operative in Sheffield's study.

Factor analysis yielded fourteen first-order motivational orientations. To further assist interpretation of relationships between first order factors, an analysis of first-order inter-correlations was carried out. Seven second-order factors were labelled as follows:

1. Interpersonal improvement/escape
2. Inner versus other-directed advancement
3. Social sharing
4. Artifact
5. Self-centredness versus altruism
6. Professional future orientedness
7. Cognitive interest

A further third-order factoring yielded four independent factors with similarity to Houle's three-factor typology (Boshier, 1971:15).

Burgess (1971) developed the Reasons for Education Participation Scale for use in his study of the motivation of 1,046 adults in the St. Louis metropolitan area, learning on a part-time basis. Half of his sample were male and half female and on the basis of the demographic data collected he considered them to be similar to the "typical adult student" described by Johnson and Rivera in the National Opinion Research Center study of 1965. Burgess hypothesized that reasons given by men and women for participating in educational activities would factor into a limited number of groups (eight). Factor analysis and oblique rotation were used to produce clusters containing at

least three items with a factor loading: .400 or greater. Seven factors were identified:

1. Desire to know
2. Desire to reach a personal goal
3. Desire to reach a social goal
4. Desire to reach a religious goal
5. Desire to take part in social activity
6. Desire to escape
7. Desire to meet formal requirements.

His hypothesis—that reasons given by men and women for participating in educational activities will factor into a limited number of groups—was supported.

Sovie (1972) used the Continued Learning Orientation Index (CLOI) in her study of the learning orientation of 237 female practicing staff nurses in the Central New York area. One hundred and twenty-three were participants in continuing nursing education programs while 114 were not. Patterns were identified using a program for Principal Components Analysis with varimax rotation. Eight learning orientation patterns were identified and labelled: Learning; Personal-goal; Occupational-goal; Professional-goal; Societal-goal; Need-fulfillment; Personal-sociability and Professional-sociability. Significant correlations ($p < .01$) were found between total educational activity and societal-goal ($r = .22$), occupational-goal ($r = .18$) and personal sociability ($r = .15$) orientations.

Examining the relationship between learning orientations and participation in continuing nursing education programs, Dickinson and

and Clark (1975) used the CLOI with a stratified random sample of 250 female registered nurses employed at five general hospitals in the Greater Vancouver area of British Columbia. Responses were sought on a 58 item questionnaire with a five-point scale ranging from "very frequently important for me" to "never important for me." Factor analysis using the principal components method with varimax rotation was applied to the CLOI data and items with factor loadings of .40 or greater were included. Eight factors were extracted accounting for 51.8 percent of the variation and "did not differ markedly from the factors identified by Sheffield and Sovie using the same instrument" (Dickinson and Clark, 1975:11). Subjects also completed an index of learning activities comprising items classified as independent (self-education) and dependent (organized continuing education). While support was evidenced for the premise that different learning orientations would influence participation in learning activities, no clear relationship between orientations and independent vs dependent learning activities was established.

Boshier (1976) in his review of factor-analytic studies of motivation, points out the error in comparing results of factor studies where different instruments are used to elicit motivational responses, since factors emerging from data are strictly a function of the input. Nevertheless some researchers have commented on similarities between their findings and those of studies using different instruments for data collection.

Motivation Orientation Studies Using the Education Participation Scale

Wishing to explore Houle's typology further, Boshier (1971), while working in New Zealand, developed the 48 item Education Participation Scale based on further examination of The Inquiring Mind and the highest loading items from Sheffield's study. A six week test/re-test reliability and factoring study for all items was conducted with 20 students not part of the sample. Test/re-test correlation co-efficients for the 48 items all had a critical value significant at the .001 level and were therefore deemed reliable. The study produced four third-order factors (orientations) namely:

other-directed advancement (possibly related to vocational or environmental influence)

learning development orientation (related to preparing oneself for future educational activity)

self vs. other-centerdness

social contact (Boshier, 1971:19).

In developing a theory of motivation for participation in adult education, Boshier reviewed that field of psychology related to needs and the human tendency to seek and maintain homeostasis, both within the organism and between the organism and its environment, including the social system, i.e., family, community.

Based on theories of adaptation and homeostasis, Boshier suggested an early model as follows:

Deprivation (tension increase) ⟶ action (participation) ⟶ satisfaction (tension decrease). (1971:21)

Excluded by this model, however, are individuals attempting to break

away from homeostasis—to escape boredom—thus moving their state of equilibrium to a different 'steady' level.

The thinking of "third force" (Humanistic) psychologists (Goble, 1971) such as Maslow, et al. suggests a model for adult education participation based on deficiency or 'needs' orientation versus self-actualization or 'growth' motivation for participation. It was Boshier's belief that refinement of the EPS scale would allow clearer differentiation of factors and would facilitate consideration of demographic information in relation to the motivational factors identified.

Morstain and Smart (1974) replicated Boshier's New Zealand study with two goals in mind: to determine the degree of similarity of the EPS factor patterns or dimensions of motivation when viewed in a cross-cultural context and the degree to which reliable scale scores could be identified from the factor dimensions generated; and secondly to determine whether the factor dimensions were related to age-sex groupings. Their sample consisted of 648 adults enrolled for part-time course work in a state college. Forty-eight EPS items were used with a nine-point response scale. Eleven factors were initially obtained and these reduced to six by use of the Cattell Scree Test (Cattell, 1965:245-276). Only variables loading ±.40 or greater were included in factors. The six retained factors were:

1. Social Relationships
2. External Expectations
3. Social Welfare
4. Professional Advancement

5. Escape/Stimulation

6. Cognitive Interest.

Of these six, the Social Relationship and Cognitive Interest factors were identical to the two factors reported by Boshier and there was close comparability on the one labelled External Expectations. There was substantial similarity in factor patterns across the two samples of adult education participants. This evidence implies that the EPS is capable of yielding similar factor patterns in a cross-cultural study. Variations were noted in the reasons for participation in different age-sex groupings. Age groups were: under 21, 21 - 40 and 41 and over. Younger adults scored higher on the Social Relationships Scale, and for all three female groups Social Relationships (88 percent of the variance) and Escape Stimulation (12 percent of variance) were the significant factors in motivation for participation. Morstain and Smart emphasized that since the sample used in this study represented learners at one institution, further studies are necessary to determine validity and utility of the EPS as a research inventory distinguishing between groups of adults and their reason for participation. Other characteristics to be considered might include "income level, degree aspiration and vocational objective" (Morstain and Smart, 1974:97).

Pursuing the idea of a psychological continuum for motivation, Boshier (1977:92) introduced the terms life-chance as a synonym for deficiency motivation and life-space as a synonym for growth motivation.

> Growth or life-space oriented people participate in adult education for <u>expression</u> rather than in an attempt to <u>cope</u> with some aspect of their life. Life-chance oriented people participate

> because of the need to survive and acquire utilitarian knowledge, attitudes or skills. (Boshier, 1977:92)

Commenting on Haag's study (1976), involving 240 participants in Vancouver night classes whose EPS factor scores were correlated with Eysenck (1968) neuroticism and Shostrom (1963) self-actualization scores, Boshier stated:

> The correlations appear to provide compelling evidence to support the notion that motivational orientations are related to psychological states which strongly resemble Maslow's description of deficiency and growth motivation. (Boshier, 1977:95)

The continuum postulated by Boshier is a psychological dimension which he believes is altered by a person's age and accomplishment of his developmental tasks, thus the amount of motivation attributable to life-chance and life-space orientations changes over a lifetime.

In Boshier's 1977 study, the EPS was administered to 242 participants in general non-credit adult education night classes in Richmond, British Columbia. A sub-sample of 76 subjects from the population of 242 provided demographic data to test hypotheses concerning relationships between mediating variables and motives for participation.

The EPS data were subject to Principal Components Analysis and then orthoganal rotation (Varimax) to produce uncorrelated factors. Items loading .40 or more after rotation were included in each factor. The five factors extracted consisted of: Escape/Stimulation, Professional Advancement, Social Welfare, External Expectations and Cognitive Interest. Contained in the five factors were 41 out of 48 EPS items and these accounted for 42.1 percent of total variance. Taking into account the neuroticism and self-actualization scores in

Haag's 1976 study, the five factors of the Boshier 1977 study were assigned to life-chance or life-space positions on the postulated psychological continuum as follows:

Escape/Stimulation	Life Chance
Professional Advancement	Life Chance
Social Welfare	Life Space
External Expectations	Life Chance
Cognitive Interest	Life Space

Five factor scores were developed for each of the 76 respondents in the sub-sample by the use of regression equations and a normalizing procedure. The factor scores were then correlated with six social and demographic variables including age, occupational status, educational attainment, social participation and previous participation in adult education (Boshier, 1977:100).

Exact results of this study are difficult to identify in the report of the study (Boshier, 1977:89-115) since details of age ranges, income ranges, etc. are omitted, possibly due to editorial constraints. Some trends are reported. Boshier believes that life-space motivation is not a linear function of age and as the individual passes through various developmental stages of adulthood he may move from life-chance orientation to life-space orientation (when income is high and occupational status is high) and back to life-chance orientation depending on the individual's social and psychological status. The social variables showed powerful relationship to the two job-related factors—Professional Advancement and External Expectations.

The results suggest that:

> Motivational orientations are more than just superficial clusters of reasons for enrollment. They seem to be surface manifestations of psychological states which are in turn probably related to psycho-social conditions in various age and socio-economic groups. (Boshier, 1977:112)

In an effort to further the application of motivation orientation research, Morstain and Smart (1977) asked the following questions:

1. Is it possible to identify a group of adult learners who have a generally similar motivational profile?
2. If so, how many distinct groups or types are there?
3. What is the salient motivational pattern of each group?
4. Are there distinguishing background or demographic characteristics for the adult learners comprising each group?
5. What are the learning environment implications for each of the derived typology groups?

Using the EPS data scale scores of 648 respondents, the data were initially subject to a multidimensional cluster analysis program, NORMIX, to construct groups. Secondly, discriminant analysis procedures were used to assess the statistical accuracy of the assignment of each adult learner to these groups. In the third phase, EPS scale score means were calculated and plotted for each group created by the cluster analysis:

> After empirically verifying the membership of each typological group through discriminant analysis, an examination of EPS and mean score profiles and selected demographic variables was undertaken to help characterize the distinguishing features of each adult learner group. (Morstain and Smart, 1977:670)

Six groups were statistically supported by the results of the cluster analysis procedure. Since the sixth group contained less than one percent of the respondents, a five-group solution was chosen for further analysis. Of the five, one group showed no particular motivation across the six EPS scales and was therefore labelled "non-directed learner."

Group II showed high scores on Social Relationships and higher scores on Social Welfare and Cognitive Interest, suggesting a "social learner" group characterization.

Group III had the highest score of all groups on Escape/Stimulation and might be called "stimulation-seeking learners."

Group IV had the highest score of all groups on External Expectations and were also high on Professional Advancement. These could be considered "career-oriented learners."

Group V showed relatively high scores on Social Relationships and Escape/Stimulation, indicating a strong desire to break the monotony or routine of life, and might be termed "life-chance learners."

The next research step examined selected demographic characteristics for members of each group: age, sex, educational attainment and family income.

Although some differences in distribution of these characteristics across groups were discovered, none of the demographic variables were uniquely descriptive for any given adult learner type. Each group of learners who were similar in motivation varied widely in the demographic characteristics of its members, hence generalizations

about motivation or interest based on age or income could be misleading in attempts at application of findings in program planning.

The foregoing studies have investigated the motivation orientation of varying groups of adult learners. Through factor analytic approaches to data collected via the EPS scale, motivational orientation groups have been identified. More recently, selected demographic variables have been correlated with EPS data in an effort to discern learning motivation patterns related to age, sex, income and other variables.

SUMMARY OF CHAPTER 2

In this chapter, three areas of literature have been reviewed. In the first part, aspects of adult education were discussed in the light of adult developmental models. The process of adult education was reviewed with consideration given to the needs of the adult learner and Registered Nurses as adult part-time students.

The second part of this literature review examines the issue of baccalaureate preparation for the practice of nursing, the complexity of nursing education in Alberta and the dilemma of upgrading sufficient numbers of Registered Nurses prepared in other than baccalaureate programs, in order to meet the existing and future health care needs of Albertans.

In the third section of this chapter, an overview of motivation orientation research is provided, first in a historical context and then through development of instruments for measurement of motivation orientation. Current efforts are discussed where attempts have been

made to correlate demographic variables with motivational orientation findings in order to apply research to adult education program development.

It is the purpose of this study to analyze EPS data collected from Registered Nurses enrolled as part-time university students, in an effort to identify motivation orientation groups existing in the sample. This should support the belief that discrete motivational typologies exist. Selected demographic variables will be correlated with the identified groups to determine what, if any, relationships are significant, in the light of previous studies completed.

Chapter 3

DESIGN, INSTRUMENTATION AND METHODOLOGY

DESIGN OF THE STUDY

The purpose of this study, as stated in Chapter 1, was to obtain and analyze information in order to answer research questions about two groups of Registered Nurses involved as part-time students enrolled in university courses in two Alberta universities.

Travers (1969:9) indicates that data have meaning only in relation to particular problems. The questions in this study are related both to adult education theory, i.e., the basic research aspects of motivational orientation, and to applied research aspects of program planning to meet the need of a specific group of adult learners.

Boshier's studies of Motivation Orientation (1971, 1976, 1977) have followed the original work of Houle and emphasized developing theory from data collected, verifying the data as the theory emerges. This process is identified by Glaser and Strauss (1967) as the development of Grounded Theory. The approach compares similar groups in order to establish sound categories and compare differences between similar groups. The comparison of maximally different groups stimulates the generation of theoretical properties once a basic framework has emerged. The comparative analysis ceases with "theoretical saturation," i.e., no new data are being found which can further develop properties. It is, however, the responsibility of the

researcher, to extend the diversity of the data as widely as possible in order to be able to generalize about the area from which the data were gathered (Glaser and Strauss, 1967:71).

Morstain and Smart (1977:676,677) are moving in the direction of applied research where use of the Education Participation Scale together with collection of demographic data extends the possibility of developing models of adult learning behaviour towards potential usefullness in program planning.

The design of this study follows a pattern of descriptive survey research "to establish the nature of existing conditions" (Travers, 1969:185) in the belief that "one man's description is grist for the next man's theory" (Warwick and Lininger, 1975:48).

THE SAMPLE

In this study, questionnaires were mailed to 229 Registered Nurses enrolled part-time in university courses. At Athabasca University 117 student names were selected and 112 Special Students at the University of Alberta were selected. All the students were enrolled for a course between July 1, 1977 and June 30, 1978. Warwick defines the sample as "some part of a larger body specially selected to represent the whole" (Warwick and Lininger, 1975:69). The sample in this study constitutes a single cross-section of the population of Registered Nurses enrolled as part-time university students in two Alberta universities during the time period indicated. The group is a non-random sample described by Treece and Treece (1977: 104) as a quota or purposive sampling, based on the belief that it is

representative of the total population to be studied. Individuals were selected for inclusion in the sample on the basis of three criteria: (1) Registered Nurses not presently holding a baccalaureate degree in nursing, (2) enrolled in part-time university study at either Athabasca University or as Special Students in the Faculty of Nursing at the University of Alberta, (3) enrolled between July 1, 1977 and June 30, 1978. The mailing lists of names and addresses were prepared by secretarial staff at University of Alberta and Athabasca University and questionnaires were mailed from those offices to ensure the confidentiality of respondents.

INSTRUMENTATION

At the outset of the study specific questions were raised regarding the characteristics of Registered Nurses enrolled as part-time university students. These questions, presented in Chapter 1, pertain to demographic, professional and academic characteristics as well as to the motivation and aspirations of this group of adult learners.

Since a sample of more than one hundred was anticipated, and respondents were widely dispersed geographically, a mailed questionnaire was deemed to be an appropriate tool for data collection (Warwick and Lininger, 1975:126; McCallon and McCray, 1975:7; Treece and Treece, 1977:182).

Discussing mailed questionnaires for data collection, McCallon and McCray (1975:7) include, among the advantages, relatively low cost (compared to interviews), the possibility of

wide geographic coverage, provision for anonymity, uniformity in responses (no interviewer bias) and the opportunity for the respondent to contemplate his answers.

This questionnaire consisted of two parts: the Demographic Data Profile consisting of 21 items on three pages and the Education Participation Scale consisting of 40 items on four pages (Appendix I). The seven pages were stapled and sent together with a covering letter (Appendix II) explaining the purpose of the study (McCallon and McCray, 1975:21). In addition to a numbered code for computer recognition, a color code was used for the questionnaires for quick identification of returns. White questionnaires were mailed to Athabasca University students and yellow questionnaires were mailed to University of Alberta students. All questionnaires were sent by first-class mail and included stamped self-addressed envelopes (Warwick and Lininger, 1975:131). A reminder letter was mailed to all the sample members two weeks following the mailing of the questionnaire (Appendix III).

THE DEMOGRAPHIC DATA PROFILE

While this instrument was constructed for the present study, similar items have been used in other surveys of Registered Nurses (Clark, 1974; Hayes and Ford, 1975; Andrews, 1978). Personal information requested included age, sex and marital status. Though the majority of practising nurses in Alberta are women (AARN, 1978), one percent are males and respondents were asked to identify themselves by sex, since some variation between men and women in motivation and

aspirations could be expected (Morstain and Smart, 1974:91; Garvin, 1976:355,356; Boshier, 1977:111).

Respondents were asked their place of residence related to given geographical locations in Alberta, since problems of accessibility exist in relation to university programs as identified in Andrews' study (1978:71).

Three questions involved socio-economic status because nurses have expressed concern about the cost associated with study at university and the need to leave their jobs in order to meet university requirements (Hayes, 1976:3,4; Andrews, 1978:61,71).

Four questions were asked which related to previous nursing education and completion of other university courses. Registered Nurse examination scores and Grade Point Average on university courses taken (if any) are considered among the criteria for applicants seeking admission to the post-RN baccalaureate nursing program at the University of Alberta. Since at least one year's experience is required of applicants to this program, four questions were asked relating to experience in the practice of nursing.

Four questions dealt with academic aspirations since this group of part-time learners constitutes a substantial pool of potential applicants to the post-RN programs and it would be helpful to the universities in Alberta sponsoring baccalaureate nursing programs to know the intentions of these students with regard to full-time study.

The final two questions were directed to the values and the beliefs of the respondents, in view of the ambivalence on the part

of Registered Nurses, identified in the literature, regarding the baccalaureate degree as the basic preparation for the practice of nursing (Wooley, 1978; Hillsmith, 1978; Lewis, 1977, 1979).

Following its construction, the questionnaire was examined by two additional researchers to ascertain content and face validity. A pilot test was conducted using 15 post-RN students enrolled at the University of Alberta as Special Students after July 1, 1978. No major changes were required in the format following the pilot test.

THE EDUCATION PARTICIPATION SCALE

Boshier's Education Participation Scale was developed for his New Zealand study (1971) and was derived from the work of Houle (The Inquiring Mind, 1961), Sheffield (1964), Burgess (1971) and an earlier study of his own (Boshier, 1969).

Interviews with 22 learners formed the basis for Houle's study resulting in his three-category typology of adult learners: the goal oriented, the activity oriented and the learning oriented. Replication of studies is difficult where inferences must be drawn from interview data and since interviews are costly to use for a large sample, Sheffield devised a 58 item questionnaire using Likert-type responses for his study in 1964. His items were based on careful examination of Houle's interview results.

Boshier (1971), working in New Zealand, re-examined and refined the work of Houle and Sheffield and developed the 48 item Education Participation Scale. Responses were checked on a nine-point Likert-type scale (very much influence . . . very little

influence). The "very much influence" category was varied systematically from left hand to right hand position on the page and high-loading factor items (identified in Sheffield's study) were randomized throughout the instrument. This format attempted to eliminate acquiescence, response and positional bias which Boshier felt were operative in Sheffield's study (Boshier, 1971:7). Prior to the use of the EPS in his 1971 study, Boshier subjected the 48 item scale to a six week test/re-test reliability and factoring study with 20 students in his university extension class. Test/re-test correlation coefficients for each of the 48 items showed a critical value significant at the .001 level (Boshier, 1971:11-15). All items were therefore deemed reliable.

Morstain and Smart (1974) used the 48 item EPS scale in their study of 648 adults in Delaware. Responses were made on the same nine-point scale (1 = very little influence; 9 = very much influence). Following factor analysis, scales were developed by assigning an item to the dimension on which it had a factor loading equal to or greater than ±.40.

> Scale scores were then calculated by summing an individual's responses to each of the items comprising a given dimension. Dividing these scale scores by the number of items in each score produced mean scale scores with a possible range of 1 to 9 . . . estimates of scale reliability were derived by calculating the coefficient alpha statistic . . . (Morstain and Smart, 1974:85)

Results showed estimates of internal consistency varying from $r = .72$ to $.86$.

Haag (1976) studied 240 night class participants in Vancouver, using a modified form of the EPS. The "new" form of the EPS

consisted of 40 items with eight 'passenger' items deleted which had failed to load clearly on any factor in previous studies. A four-point response scale was introduced. A comparison of the new and the old scale follows:

New Scale

To seek knowledge for its own sake	Much influence	Moderate influence	Little influence	No influence

Old Scale

To keep up with others	Very much influence	Much influence	Moderate influence	Little influence	Very little influence
	9 *	7 *	5 *	3 *	1

"Numerical response scales (which require respondents to circle or otherwise indicate a number) introduce an unnecessary and possibly confounding variable" (Boshier, 1976:34). A further reason Boshier mentions for changing the response scale was the lack of a "no influence" category in the old scale, which was potentially frustrating for some respondents.

While strong claims can be made for the cross-cultural reliability of the EPS (Boshier, 1971, 1976; Morstain and Smart, 1974; Haag, 1976), we are reminded of the need for continued effort to establish the validity of the derived motivational groupings (Boshier, 1977:113, Morstain and Smart, 1977:677).

THE PRESENT STUDY

The "new" 40 item EPS scale was used to collect data from Registered Nurses enrolled part-time in university courses

(Appendix I). Respondents were asked to "think back to when you enrolled for your university course in 1977-78 and indicate the extent to which each of the reasons below influenced you to participate." The words university and in 1977-78 were added to the existing EPS scale directions. While Boshier (1976:35) believes that "respondents will give more reliable and valid responses if they only have to consider their present activity," for the purpose of this study the additional words were necessary.

SUMMARY OF THIS CHAPTER

This chapter discusses the design of the study, the nature of the sample and the instrumentation used. Rationale is provided for the development of the Demographic Data Profile. The origin and development of the Education Participation Scale is discussed, showing both the old and new form of item presentation. Observations concerning reliability and validity are provided. Alterations in format of the EPS required for the present study are identified.

Chapter 4

RESULTS OF THE STUDY

THE SAMPLE RETURN

Questionnaires were mailed to Registered Nurses identified (with the assistance of Athabasca University and University of Alberta Faculty of Nursing) as part-time enrollees during the academic year July 1, 1977 to June 30, 1978. A total of 229 questionnaires were mailed, 117 to Athabasca University enrollees and 112 to University of Alberta enrollees. There were 67 returns from the Athabasca mailing (57 percent) and there were 80 returns from the University of Alberta mailing (71 percent) for a total of 147 replies as shown in Table 1. This constitutes a 64 percent return on the total mailed.

Table 1

The Sample Return

Institution	Questionnaires Mailed	Questionnaires Returned		
		Males	Females	Total
Athabasca University	117	3	64	67
University of Alberta	112	1	79	80
Total	229	4	143	147

Of the 147 replies received, 133 questionnaires were usable for further analysis. Cases excluded from the sample included four

females already holding baccalaureate degrees, one enrolled at University of Alberta and three at Athabasca University, and four males, three of whom were among the Athabasca enrollees and one enrolled at University of Alberta. One of these men already held a baccalaureate degree other than nursing, and one indicated no interest in pursuing a degree. Since registration figures (AARN, 1978) indicate that males constitute approximately one percent of the total number of Registered Nurses in Alberta, and since males formed only two percent of the respondents, the male respondents were eliminated from the sample. Six other respondents were excluded due to incomplete questionnaires or the respondent indicating the intention of changing field, e.g., one was studying Theology. One respondent stated the wish to complete a University degree in Red Deer and did not complete the questionnaire.

Questionnaires were mailed on January 25th, 1979 and a prompt letter was sent to all individuals in the sample on February 12th (see Appendix III). Table 2 shows the responses by institution.

Table 2

Initial Response and Response after Prompt by Institution

Institution	Initial Response	After Prompt	Total
Athabasca University	35	20	55
University of Alberta	50	28	78
Total	85	48	133

In the first response 35 usable Athabasca University replies

were received and 50 usable University of Alberta replies for a total of 85 usable replies. In the second response, i.e., those questionnaires returned after February 19th, there were 20 Athabasca University replies and 28 University of Alberta replies for a total of 48 responses. The total n = 133.

Descriptive statistics using Statistical Package for the Social Sciences (Nie, Hull et al., 1975:190,197) were obtained for the initial response group and for the response group returning questionnaires after the prompt letter had been mailed one week. To determine the homogeneity of the sample, descriptive statistics from the initial response group were compared with results from the second response group. No differences were noted between the two groups and therefore the two response groups were considered to form a single homogenous group.

Again using SPSS (Nie, Hull et al., 1975:190,197), descriptive statistics were obtained for the Athabasca University respondents and for the University of Alberta respondents and a comparison drawn between the two groups across the entire sample n = 133. Tables were prepared showing variation by institutional registration where the data indicated differences existing between Athabasca University and University of Alberta enrollees.

While slight variations in mean and standard deviation for the Athabasca and University of Alberta group occurred on some variables in the Education Participation Scale, no significant differences were noted and the similarity of the two groups were judged sufficient to consider the sample a homogenous group for further analysis.

The second part of this chapter compares the Athabasca student subsample and the University of Alberta student subsample on the Demographic Data Profile.

THE ATHABASCA STUDENT AND THE UNIVERSITY OF ALBERTA STUDENT SUBSAMPLES COMPARED ON THE DEMOGRAPHIC DATA PROFILE

This section deals with the demographic data of the entire sample. Enrollees are compared by institution of enrollment where, on scrutiny of the data, differences between the two subsamples appeared significant.

Biographical Data

In Table 3, marital status of enrollees in each of the two subsamples is compared by institution of enrollment. While in the overall sample, two-thirds of the enrollees are married (66.9 percent), there are more single nurses and nurses in the "other" category, i.e., single, widowed, separated, or divorced in the University of Alberta subgroup. The existance of more married enrollees in the Athabasca student group may be related to residency outside of Edmonton. Single women and women whose marriages have ended tend to be found in greater numbers in urban settings.

Table 4 compares place of residence by institutional enrollment. There was one missing case. While slightly more than half the total enrollees (56.8 percent) indicate residence in the City of Edmonton, about three-quarters of the Edmonton dwellers are studying at the University of Alberta (73.3 percent) and about one-quarter are studying through Athabasca University (26.7 percent). An interesting

Table 3

Marital Status by Institution of Enrollment

Marital Status		Athabasca University	University of Alberta	Total
Single	Frequency	9	19	28
	Column %	16.4	24.4	
	Total %	6.8	14.3	21.1
Married	Frequency	40	49	89
	Column %	72.7	62.8	
	Total %	30.1	36.8	66.9
Other	Frequency	6	10	16
	Column %	10.9	12.8	
	Total %	4.5	7.5	12.0
Total	Frequency	55	78	133
	Total %	41.4	58.6	100.0

Table 4

Place of Residence by Institution of Enrollment

Place of Residence		Athabasca University	University of Alberta	Total
City of Edmonton	Frequency	20	55	75
	Row %	26.7	73.3	
	Column %	37.0	70.5	
	Total %	15.2	41.7	56.8
50 miles radius of Edmonton	Frequency	8	17	25
	Row %	32.0	68.0	
	Column %	14.8	21.8	
	Total %	6.1	12.9	18.9
Other Alberta, N of Red Deer	Frequency	14	6	20
	Row %	70.0	30.0	
	Column %	25.9	7.7	
	Total %	10.6	4.5	15.2
Other Alberta, S of Red Deer	Frequency	5	0	5
	Row %	100.0	0.0	
	Column %	9.3	0.0	
	Total %	3.8	0.0	3.8
Outside Alberta	Frequency	7	0	7
	Row %	100.0	0.0	
	Column %	13.0	0.0	
	Total %	5.3	0.0	5.3
Total	Frequency	54	78	132
	Total %	40.9	59.1	100.0

9.1 percent of the total enrollees (all studying through Athabasca University) live either in Alberta South of Red Deer or outside of Alberta. Another 16.7 percent of the total enrollees live within a 50 mile radius of Edmonton or live in other Alberta points North of Red Deer and are enrolled at Athabasca University. In the overall sample, 40.9 percent of enrollees were registered at Athabasca University and 59.1 percent were registered at the University of Alberta.

Table 5 shows number of dependent children by marital status and Table 6 shows number of dependent adults by marital status. No significant differences were noted between the Athabasca University and the University of Alberta respondents on these variables.

Three-quarters of the total respondents (75.9 percent) indicated no dependent children. Since two-thirds (66.9 percent) of the total enrollees are married and 12 percent are in the "other" category, these findings would seem to reflect two possible conditions: the declining birthrate in the age group 21 to 45 years; and the possibility that some of the over 40 year old nurses have adult children who are no longer dependent.

In Table 6, marital status is shown by number of dependent adults. There were five missing cases. Only 8.6 percent of respondents indicated adult dependents and these respondents were all married. Although respondents made comments later in the questionnaire about attending university full-time "when they could afford it" and "when it was financially possible," it would seem that numbers of dependents

Table 5

Marital Status by Number of Dependent Children

Marital Status		Number of Children				Total
		None	1	2	3 or more	
Single	Frequency	28	0	0	0	28
	Total %	21.1	0.0	0.0	0.0	21.1
Married	Frequency	67	8	9	5	89
	Total %	50.4	6.0	6.8	3.8	66.9
Other	Frequency	6	2	4	4	16
	Total %	4.5	1.5	3.0	3.0	12.0
Total	Frequency	101	10	13	9	133
	Total %	75.9	7.5	9.8	6.8	100.0

Table 6

Marital Status by Number of Dependent Adults

Marital Status		Number of Adult Dependents: Self Only	One Other	Two or More	Total
Single	Frequency	28	0	0	28
	Total %	21.9	0.0	0.0	21.9
Married	Frequency	76	10	1	87
	Total %	59.4	7.8	0.8	68.0
Other	Frequency	13	0	0	13
	Total %	10.2	0.0	0.0	10.2
Total	Frequency	117	10	1	128
	Total %	91.4	7.8	0.8	100.0

are not the cause of financial problems for these part-time learners.

Table 7 displays means of financial support while studying by institutional enrollment. There was one missing case. It can be seen that slightly more than half of the enrollees (52.3 percent) were employed full-time while studying. The Athabasca and University of Alberta enrollees were alike in this regard, while twice as many University of Alberta enrollees (6.1 percent) as Athabasca enrollees (3.0 percent) indicated part-time work while studying. It is possible that Athabasca enrollees who tend to live away from large urban settings may find part-time employment less readily available to them than to the city-dwelling enrollees. Significantly more University of Alberta students (10.6 percent) indicated family support while studying than Athabasca students (1.5 percent). Athabasca enrollees were also more likely to use loans, grants, etc. as a means of financial support (1.5 percent) than University of Alberta enrollees (0.8 percent), perhaps out of necessity if part-time work is less readily available to them.

In Table 8, age ranges are presented for enrollees by institution of enrollment. Four respondents did not state age reducing the sample to n = 129. As seen in Table 8, the age range of enrollees was 21 years to 56 years. The oldest enrollee was 56 years and the mean age was 33 years for both institutions. The majority of the enrollees (82.2 percent) are in the age range 21 to 40 years. Of the nurses in this 21-40 age range, 50.4 percent are enrolled at the University of Alberta while 31.8 percent are enrolled at Athabasca University. Three nurses in the 50 plus age range were enrolled at Athabasca University.

Table 7

Means of Financial Support by Institutional Enrollment

Means of Financial Support		Athabasca University	University of Alberta	Total
Part-time employment	Frequency	4	8	12
	Total %	3.0	6.1	9.1
Full-time employment	Frequency	31	38	69
	Total %	23.5	28.8	52.3
Loans, etc.	Frequency	2	1	3
	Total %	1.5	0.8	2.3
Family support	Frequency	2	14	16
	Total %	1.5	10.6	12.1
Combination of above	Frequency	15	17	32
	Total %	11.4	12.9	24.2
Total	Frequency	54	78	132
	Total %	40.9	59.1	100.0

Table 8

Age Ranges of Enrollees by Institution of Enrollment

Age in Years		Athabasca University	University of Alberta	Total
21-30	Frequency	24	34	58
	Total %	18.6	26.4	45.0
31-40	Frequency	17	31	48
	Total %	13.2	24.0	37.2
41-50	Frequency	9	11	20
	Total %	7.0	8.5	15.5
51+	Frequency	3	0	3
	Total %	2.3	0.0	2.3
Total	Frequency	53	76	129
	Total %	41.1	58.9	100.0

Professional Data

Table 9 shows initial RN education program and year of graduation with institutional enrollment. There was one missing case. Of the total number of enrollees, 88.6 percent are hospital diploma graduates and 11.4 percent indicate "college or other" as initial preparation in nursing. Since the first Registered Nurses prepared in college programs in Alberta graduated in 1969, it is not surprising that the number of enrollees indicating "college or other" as initial education would be low prior to 1969 (2.3 percent). These would be individuals prepared in RN programs outside of Alberta. Despite this lower number of "college and other" graduates available as enrollees, they do represent 11.4 percent of the total and slightly more than half of them (53.3 percent) have chosen Athabasca for courses of study.

Among the hospital graduates, 39.3 percent chose Athabasca courses while 60.7 percent chose University of Alberta courses. The possibility exists that the college graduates more readily choose the independent learning opportunity provided through Athabasca courses, however more recent hospital program graduates (1969-78) showed greater preference for Athabasca courses (17.9 percent) than those hospital diploma graduates of an earlier period (1959-68: 13.7 percent).

The year of graduation ranges from 1944 to 1977 with the mean year, 1966. The median (1968) indicates that 51.5 percent of the enrollees graduated in or before 1968.

Respondents were asked to indicate the number of years they had engaged in the active practice of nursing. The range of responses

Table 9

Initial RN Education Program and Year of Graduation with Institutional Enrollment

Initial RN Education Program		Before 1958		1959-1968		1969-1978		
		Athabasca University	University of Alberta	Athabasca University	University of Alberta	Athabasca University	University of Alberta	Total
Hospital diploma	Frequency	9	11	16	29	21	31	117
	Row %	7.7	9.4	13.7	24.8	17.9	26.5	
	Total %	6.8	8.3	12.1	22.0	15.9	23.5	88.6
College and other	Frequency	1	0	2	0	5	7	15
	Row %	6.7	0.0	13.3	0.0	33.3	46.7	
	Total %	0.8	0.0	1.5	0.0	3.8	5.3	11.4
Total	Frequency	10	11	18	29	26	38	132
	Total %	7.6	8.3	13.6	22.0	19.6	28.8	100.0

was one to thirty years with 49.6 percent indicating that they had practised seven years or less. Ten nurses had engaged in active practice for over twenty years.

In Table 10 information is displayed indicating employment status and position title while studying by institutional enrollment for those respondents who indicated that they were employed full or part-time in nursing while studying. There were 112 working enrollees with one missing case. Two-thirds of the respondents (66.1 percent) indicated that they were employed as staff nurses while 17 percent indicated that they had some leadership-management responsibility (head nurse, supervisor). The remaining 17 percent, numbering 19 respondents, checked the "other" category and 18 explained the nature of their employment. These replies are categorized by institutional enrollment in Table 11.

Of interest regarding this "other" category is the fact that all but one of the Athabasca enrollees lived outside of Edmonton city (and two were out of Alberta) while all the University of Alberta enrollees were City of Edmonton residents save one, who indicated living within an 80 mile radius of the city. It would seem possible that enrollees in both institutions are seeking courses to meet a felt need occasioned by employment demands going beyond the education provided in their initial nursing preparation.

Table 12 presents beliefs of respondents about the need for a baccalaureate degree with year of graduation and RN program. The "year of graduation" category includes two periods before graduates emerged from college programs in Alberta and one period afterward (1969-78).

Table 10

Employment Status and Position Title of Working Enrollees by Institution of Enrollment

Position Title		Athabasca University		University of Alberta		Total
		Full Time	Part Time	Full Time	Part Time	
Staff nurse	Frequency	23	14	20	17	74
	Total %	20.5	12.5	17.9	15.2	66.1
Head nurse	Frequency	4	0	13	0	17
	Total %	3.6	0.0	11.6	0.0	15.2
Supervisor	Frequency	1	0	1	0	2
	Total %	0.9	0.0	0.9	0.0	1.8
Other	Frequency	8	0	8	3	19
	Total %	7.1	0.0	7.1	2.7	17.0
Total	Frequency	36	14	42	20	112
	Total %	32.1	12.5	37.5	17.9	100.0

Table 11

Position Title by Institutional Enrollment for Respondents Choosing the "Other" category

Position Title	Athabasca University	University of Alberta	Total
Nursing Administration	2	3	5
Nursing Education	1	4	5
Community Health Nursing	4	-	4
Physician's Office	-	2	2
Nurse Consultant	1	1	2
Total	8	10	18
Missing			1
			19

Table 12

Beliefs about Need for a Degree with Year of Graduation and RN Program

Beliefs about Need for a Degree		1950-1958		1959-1968		1969-1978		Total
		Hospital diploma	College & others	Hospital diploma	College & others	Hospital diploma	College & others	
Do not need	Frequency	1	1	7	0	11	1	21
	Column %	5.3	100.0	16.3	0.0	23.4	8.3	
	Total %	0.8	0.8	5.6	0.0	8.9	0.8	16.9
Government will require	Frequency	1	0	2	0	3	1	7
	Column %	5.3	0.0	4.7	0.0	6.4	8.3	
	Total %	0.8	0.0	1.6	0.0	2.4	0.8	5.6
Do need	Frequency	13	0	12	0	12	5	42
	Column %	68.4	0.0	27.9	0.0	25.5	41.7	
	Total %	10.5	0.0	9.7	0.0	9.7	4.0	33.9
AARN will require	Frequency	0	0	6	0	1	2	9
	Column %	0.0	0.0	14.0	0.0	2.1	16.7	
	Total %	0.0	0.0	4.8	0.0	0.8	1.6	7.3
Only for teaching and supervision and public health	Frequency	4	0	16	2	20	3	45
	Column %	21.1	0.0	37.2	100.0	42.6	25.0	
	Total %	3.2	0.0	12.9	1.6	16.1	2.4	36.3
Total	Frequency	19	1	43	2	47	12	124
	Total %	15.3	0.8	34.7	1.6	37.9	9.7	100.0

The sample for this table shows n = 124 with nine missing cases.

One-third of all respondents (33.9 percent), as shown in Table 12, believe that professional nurses do need a baccalaureate degree. Slightly over one-third (36.3 percent) believe a degree is needed only for nurses engaged in teaching, supervision or public health activity. These areas have been the traditional practice fields for nurses having a baccalaureate degree. One sixth of the nurses (16.9 percent) believe "nurses do not need a baccalaureate degree" while the remaining one-sixth are about evenly divided (5.6 percent and 7.3 percent) between two other beliefs: that "the government will soon require nurses to have a baccalaureate degree" (5.6 percent) and that "the AARN will soon require all nurses to have a baccalaureate degree" (7.3 percent). Hospital diploma graduates from pre 1950-1958 are stronger believers in the need for professional nurses to have a baccalaureate degree (68.4 percent) than hospital diploma graduates of the next era, 1959-1968, where only 27.9 percent indicate such a belief. Even fewer of the more recent hospital diploma graduates (25.5 percent) indicate belief in the need for a baccalaureate degree and are far fewer when compared with 41.7 percent of college graduates for the recent period 1969-1978. Instead of a belief in the general need for a baccalaureate degree for professional nurses, increasing numbers of hospital diploma graduates (1959-1968, 37.2 percent; 1969-1978, 42.6 percent) believe that the degree is needed only for nurses practising in teaching, supervision and public health. Despite these beliefs, 113 respondents indicated intention of full-time enrollment in a baccalaureate degree program in

the future! (See Table 19.)

Of the total percentage (5.6 percent) believing "government will soon require them to have a baccalaureate degree," 2.4 percent of the most recent graduates among hospital diploma nurses held this belief compared with 0.8 percent of college graduates for the same graduation period (1969-1978).

Of the total percentage believing that "the AARN will soon require them to have a baccalaureate degree" (7.3 percent), more of the recent college graduates (1969-1978) evidenced this with 1.6 percent indicating this belief in contrast with 0.8 percent of their hospital diploma colleagues of the same graduation period. The "do not need a degree" category (16.9 percent of the total responses) shows 8.9 percent of recent hospital diploma graduates (1969-1978) hold this belief compared to 0.8 percent of college graduates for the same period.

Another way of looking at the respondents and their beliefs is presented in Table 13. Beliefs about the need for a baccalaureate degree are shown by institutional enrollment with an n = 125 and eight missing cases.

Of the 17.6 percent indicating "do not need a degree," 10.4 percent are University of Alberta enrollees. Among Athabasca University enrollees, 4.0 percent believe "government will soon require a degree" compared with 1.6 percent of enrollees at University of Alberta. While a total of 33.6 percent of enrollees (where n = 125) believe a baccalaureate degree is needed, 24.0 percent of these believers are enrolled at University of Alberta and 9.6 percent at Athabasca

Table 13

Beliefs about Need for Baccalaureate Degree by Institutional Enrollment

Beliefs about Need for Degree		Athabasca University	University of Alberta	Total
Do not need	Frequency	9	13	22
	Total %	7.2	10.4	17.6
Government will require	Frequency	5	2	7
	Total %	4.0	1.6	5.6
Do need	Frequency	12	30	42
	Total %	9.6	24.0	33.6
AARN will require	Frequency	4	5	9
	Total %	3.2	4.0	7.2
Only for teaching and supervision and public health	Frequency	20	25	45
	Total %	16.0	20.0	36.0
Total	Frequency	50	75	125
	Total %	40.0	60.0	100.0

University. Of the small group (7.2 percent) believing that "the AARN will soon require professional nurses to have a degree," fewer of the Athabasca enrollees are misinformed (3.2 percent) than the University of Alberta enrollees (4.0 percent). The substantial number of respondents (36.0 percent) believing that the baccalaureate degree is needed only for teaching, supervision and public health include a greater number of University of Alberta enrollees (20.0 percent) than Athabasca enrollees (16.0 percent). In three of the five belief categories, the Athabasca enrollees seem somewhat better informed than their counterparts enrolled at the University of Alberta.

Academic Characteristics of the Individuals in the Sample

Academic data related to enrollees seeking a baccalaureate degree are consolidated in Table 14. The subject mean on Registered Nurse examinations is presented for BScN seekers, with year of RN graduation as a range. The ranges chosen for year of RN graduation correspond to changes in the provincial examination system for nurses. Those respondents writing Registered Nurse examinations prior to 1954 are excluded from this table. Commencing in April, 1954, candidates wrote the five subject papers currently in use, i.e., Medical Nursing, Surgical Nursing, Obstetric Nursing, Nursing of Children and Psychiatric Nursing. Between 1954 and 1958, National League for Nursing examinations were in use followed in 1959-1969 by the Conjoint Nurse Graduation and Registration Examinations. In 1970, the Canadian Nurses Association Testing Service examinations commenced and are currently being used through 1979 (AARN, 1978).

Table 14

RN Subject Score Range with Year of Graduation Range for Enrollees Seeking a BScN

RN Subject	1954-1957	1958-1969	1970-1971	1972-1977	Total
Medical Nursing	500-549 n = 3	500-549 n = 29	550-599 n = 12	550-599 n = 34	78
Surgical Nursing	550-599 n = 3	500-549 n = 28*	500-549 n = 12	550-599 n = 34	77
Obstetric Nursing	450-499 n = 3	550-599 n = 29	500-549 n = 12	550-599 n = 34	78
Nursing Children	550-599 n = 3	500-549 n = 28*	500-549 n = 12	550-599 n = 35	78
Psychiatric Nursing	500-549 n = 3	550-549 n = 25*	500-549 n = 12	550-599 n = 34	74
RN Mean score	500-549	500-549	500-549	550-599	

* Missing cases.

On the DDP questionnaire, page 2 (see Appendix I), respondents were asked to check the range for their RN scores on the table provided. Subject means for respondents in each graduation range seeking a BScN were then calculated and are shown in Table 14 as an RN score range. Only an n = 78 was available since DDP items 9, 10 and 16 had to be complete for inclusion in the calculations.

The mean score for all RN exams across respondents included in the table remained constant, with the exception of the more recent graduates (1972 to present), where mean scores now range between 550-599 compared with mean scores ranging between 500-549 in the earlier graduating groups. The passing score for the Canadian Test Service Examinations has been set at 350 since 1972 (AARN, 1978).

Using the descriptive statistics available for the Athabasca and University of Alberta subsample related to RN scores, Table 15 was prepared showing frequency and percentage of high scorers (500+) on each RN examination subject by institution of enrollment.

Table 15

Frequency and Percentage of High Scorers (500+) on RN Subject Examinations by Institution of Enrollment

	Athabasca University			University of Alberta			
RN Subject	(f)	percent	n	(f)	percent	n	Total number
Medical Nursing	29	52.7	38	38	48.8	55	93
Surgical Nursing	31	56.4	38	41	52.6	54	92
Nursing Children	28	50.9	38	36	46.2	55	93
Obstetric Nursing	31	56.4	38	39	50.0	54	92
Psychiatric Nursing	25	45.4	37	35	44.9	51	88

This table suggests that a slightly greater percentage of Athabasca enrollees achieved higher scores on RN exams than University of Alberta enrollees.

Academic Aspirations of BScN Seekers Wishing to Enroll at University of Alberta

In Table 16 are presented the number of BScN seekers who wish to enroll at the University of Alberta on a full-time basis and who have completed university courses since 1974, by desired year of enrollment. Across all time of enrollment categories, less than half of the respondents (45.1 percent) have taken courses since 1974. The category with the greatest number of course takers (13.2 percent) represented those respondents wishing to enroll full-time within the next three years. Asked to specify courses taken, some respondents indicated three or more courses completed. Some respondents indicated course numbers and names while others only listed the subject. In Table 17 the responses are categorized together with the number of individuals who indicated a completed course in that area.

The large number of individuals who have completed Psychology courses would seem to indicate that the requirement for introductory level Psychology as a prerequisite to admission to the Post-RN BScN program is now well recognized.

Table 16

BScN Seekers Who Have/Have Not Completed University Courses Since 1974 by Desired Year of Enrollment

Completed University Courses		BScN Seekers					
		Presently enrolled	1979-1980	Within 3 years	Within 5 years	Other	Total
No courses	Frequency	10	7	17	10	6	50
	Total %	11.0	7.7	18.7	11.0	6.6	54.9
Additional courses	Frequency	8	5	12	9	7	41
	Total %	8.8	5.5	13.2	9.9	7.7	45.1
Total	Frequency	18	12	29	19	13	91
	Total %	19.8	13.2	31.9	20.9	14.3	100.0

Table 17

University Courses Completed by Enrollees Since 1974
Showing Number of Respondents

Psychology	37	Religious Studies	2
Sociology	25	Chemistry	3
English	15	World Ecology	1
Biology	5	Criminology	1
Political Sc.	2	Pathology	1
History	1	Nursing Courses	5
Philosophy	2		

Additional respondents stated:

five full university courses
university nursing credit courses
most of the non-nursing courses for the BScN
non-nursing but options for nursing
two credits towards a BA
first year BEd
Athabasca General Degree Program 42 credits
one year of BScN nursing at U of A
nursing of High Risk Mother

Table 18 shows commitment of BScN seekers wishing to enroll at the University of Alberta by RN mean. The small n in this table (n = 60), occurs because only cases with complete RN scores were included and only those indicating a wish to complete a baccalaureate degree through full-time study at the University of Alberta.

As shown in this table, 21 individuals are very sure of seeking enrollment within the next five years and another 17 individuals are fairly sure of their intentions. The RN mean scores for this small subsample are in the 500+ range across all commitment categories and enrollment periods except for those respondents wishing to enroll in 1979-1980 (whose scores are in the lower range 450-499). In addition to the information included in Table 18, the questionnaire item number 17 (see Appendix I) elicited a variety of written responses, especially where respondents checked the "other" category. These responses are listed below:

- when I can afford it
- when financially feasible
- whenever I can afford to—would like to complete on a part-time basis and evening classes
- whenever I can afford it on home time
- no definite plans due to family commitments and financial situation
- not full time
- not able to attend full-time university—please advise—would like to complete
- depends on transfer to the city—Calgary or Edmonton
- current regulations make this virtually impossible to guess

Table 18

Commitment of BScN Seekers Wishing to Enroll at University of Alberta by RN Mean

Commitment	Presently enrolled		1979-1980		Within 3 years		Within 5 years		Other		
	(f)	RN range	(f)	RN range	(f)	RN range	(f)	RN range	(f)	RN range	Total
Very sure	8	550-599	10	450-499	9	550-599	2	550-599	1	600-649	30
Fairly sure	-	-	-	-	9	550-599	8	550-599	4	550-599	21
Unsure	1	500-549	-	-	1	550-599	3	550-599	4	500-549	9
Total	9		10		19		13		9		60

- unsure, depends on how soon courses are available
- would prefer part-time
- when my family is grown up
- probably five or six years
- approximately ten years needed
- no definite plans now
- no definite date
- not known at present.

Five of these respondents indicate financial concerns, two mention family commitments and five specify a need for part-time study. Full-time enrollment seems to pose a problem for a number of respondents.

The DDP questionnaire item 19 (see Appendix I) asked respondents wishing to obtain a baccalaureate degree to indicate their choice of institution for full-time study. The results are shown in Table 19 with institution of choice for enrollment.

Out of the total number of BScN seekers (n = 113), 82.3 percent or 93 individuals wish to enroll at University of Alberta. One-third of these respondents (32 individuals) are part-time students at Athabasca University. Of the total number (n = 113), 5.3 percent would choose to study at University of Calgary. Once more the "other" category, with 12.4 percent of respondents, elicited a variety of written responses as listed below:

- moving to Toronto
- UBC
- where I live

Table 19

BScN Seekers by Institution of Choice for Enrollment

BScN Seekers		Institution of Choice for Enrollment			
		University of Calgary	University of Alberta	Other	Total
Part-time at Athabasca	Frequency	3	32	9	44
	Total %	2.7	28.3	8.0	38.9
Part-time at University of Alberta	Frequency	3	61	5	69
	Total %	2.7	54.0	4.4	61.1
Total	Frequency	6	93	14	113
	Total %	5.3	82.3	12.4	100.0

- in the Maritimes
- depends on husband's education and career aspirations
- U of Saskatchewan, Saskatoon
- University of Lethbridge
- U of A unless available other than full-time—e.g. summer courses.

These responses reflect a high degree of mobility among nurses who are part-time learners and some elements of frustration were expressed in additional comments related to their attempts to negotiate admission and continuation in the academic system.

Enrollees seeking a baccalaureate degree were asked to identify the major outcome they perceived for themselves as a result of completing a baccalaureate degree. In Table 20 the BScN seekers are shown according to year-range of graduation and program of preparation by major perceived outcome.

Of the total enrollees shown in this group (n = 114), 36.8 percent believed more satisfying or challenging work to be the outcome, while 36 percent saw the opportunity to change field of practice as the major outcome. Personal satisfaction in obtaining a degree was the expected outcome for 14 percent, improved working conditions were expected by 11.4 percent while only 1.8 percent saw improved salary as a major outcome. This is not surprising in view of the fact that only sixty dollars per month differential above RN salary is paid to the nurse holding a baccalaureate degree and employed in an institution (e.g., hospital) covered by a collective agreement (Provincial Collective Agreement AHA-UNA, 1978:24).

Table 21 shows that of the total percentage of nurses seeking

Table 20

Major Outcome Perceived to Result from Acquiring a BScN by Year-Range of Graduation and Program of Initial Preparation

Major Outcome		Year of Graduation: Before 1958	1959-1968		1969-1978		Total
		Hospital	Hospital	College & others	Hospital	College & others	
Improved working conditions	Frequency	1	6	0	4	2	13
	Total %	0.9	5.3	0.0	3.5	1.8	11.4
Improved salary	Frequency	0	1	0	1	0	2
	Total %	0.0	0.9	0.0	0.9	0.0	1.8
More challenging or satisfying work	Frequency	6	14	1	15	6	42
	Total %	5.3	12.3	0.9	13.2	5.3	36.8
Change field of practice	Frequency	6	12	0	22	1	41
	Total %	5.3	10.5	0.0	19.3	0.9	36.0
Personal satisfaction	Frequency	3	7	1	4	1	16
	Total %	2.6	6.1	0.9	3.5	0.9	14.0
Total	Frequency	16	40	2	46	10	114
	Total %	14.0	35.1	1.8	40.4	8.8	100.0

Table 21

Major Outcome of Obtaining a Degree as Perceived by BScN Seekers by Institution of Enrollment

Major Outcome		Athabasca University	University of Alberta	Total
Improved working conditions	Frequency	5	8	13
	Row %	38.5	61.5	
	Total %	4.4	7.0	11.4
Improved salary	Frequency	1	1	2
	Row %	50.0	50.0	
	Total %	0.9	0.9	1.8
More challenging work	Frequency	11	31	42
	Row %	26.2	73.8	
	Total %	9.6	27.2	36.8
Change field	Frequency	17	24	41
	Row %	41.5	58.5	
	Total %	14.9	21.1	36.0
Personal satisfaction	Frequency	9	7	16
	Row %	56.3	43.8	
	Total %	7.9	6.1	14.0
Total	Frequency	43	71	114
	Total %	37.7	62.3	100.0

improved working conditions (11.4 percent), more University of Alberta enrollees (61.5 percent) see this as a major outcome than Athabasca University enrollees (38.5 percent). Of the total enrollees seeking more challenging work (36.8 percent), nearly three-quarters (73.8 percent) are University of Alberta enrollees and only one-quarter (26.2 percent) are Athabasca University enrollees. A slightly larger number of Athabasca University enrollees (56.3 percent) are seeking personal satisfaction compared to the 43.8 percent of that category enrolled at University of Alberta. The two subsample groups are very similar in the categories "improved salary" and "changing field."

SUMMARY OF DATA FROM THE DDP

A summary of data from the DDP allows a profile to be drawn of the Registered Nurse who is a part-time enrollee in university courses at either of two Alberta universities, the University of Alberta or Athabasca University.

She is married, with no children nor adult dependents, lives in Edmonton, is 33 years of age, graduated from a hospital diploma school of nursing since 1968 and has been engaged in the active practice of nursing for seven years since graduation. Her RN scores ranged between 500-549 and she has not completed any university courses since 1974. She works full-time in a staff nurse position and she believes that a degree is necessary only for a nurse working in teaching, supervision or public health. She wants to obtain a BScN in order to obtain more challenging work or to change field of practice. She wishes to enroll full-time at the University of Alberta

within three years.

While this profile represents the findings descriptive of the total sample, some modifications are necessary as indicated by the data presented in Tables 1-21, where the learners in the Athabasca and University of Alberta subsamples are considered separately.

More Athabasca enrollees are married than their counterparts at University of Alberta. Athabasca enrollees include learners older than those at the University of Alberta. Fewer Athabasca enrollees live in Edmonton city and more of them are widely scattered geographically than the University of Alberta enrollees. More Athabasca enrollees sought loans to finance their study than University of Alberta enrollees, however there were few respondents in this category (n = 3). Fewer Athabasca learners worked full or part-time at nursing while studying. If the enrollee is a college graduate, she is somewhat more likely to have chosen Athabasca than University of Alberta for part-time study. More enrollees studying at Athabasca University showed high scores on RN examinations (500+) than enrollees studying at the University of Alberta, and more Athabasca enrollees were seeking personal satisfaction as a major outcome of having a baccalaureate degree than University of Alberta enrollees, who perceived more challenging work or changing field of practice as major outcomes.

Johnstone and Rivera's 1965 'overview' statement providing a social profile of the adult education participant is still applicable to this learning group in 1978. Their description:

> The adult education participant is just as often a woman as a man, is typically under forty, has completed high-school or more, enjoys an above-average income, works full-time and most often in a white-collar occupation, is married and has children and lives in an urban area . . . (Johnstone and Rivera, 1965:8).

At the end of the DDP questionnaire, respondents were asked "Are there any comments you would like to make?" and a small space was provided for replies A total of 60 written comments (including two letters) were provided by the respondents. These comments (reprinted verbatim in Appendix IV) represented the respondents' opinions on a variety of concerns related to nursing education. The need for greater accessibility to university programs to allow nurses to complete a BScN was mentioned frequently with reference to limitations in enrollment due to quotas in the post RN program seen as an obstacle. The desirability of more off-campus nursing courses was mentioned and the possibility of alternatives to full-time study questioned. Numerous comments related to individual beliefs about the need for professional nurses to have a baccalaureate degree and some statements suggesting dissatisfaction with current programs and the need for change in the system of nursing education. The large number of responses to the open ended question would seem to indicate a substantial interest on the part of the respondents in the whole question of current nursing education.

ANALYSIS OF THE EDUCATION PARTICIPATION SCALE

Method of Analysis

Education Participation Scale data from 127 respondents was subject to factor analysis by the principal components method described in the Statistical Analysis for the Social Sciences (Nie, Hull et al., 1975:470). The selection of the number of factors to be considered was guided by Cattell's "Scree Test" (Kim and Mueller, 1978:45). This test assesses the linearity of the curvature of the eigenvalues as they are plotted and provides an analytical method for determining the appropriate number of factors to retain for further rotation and analysis (Cattell, 1965). The resulting factor analysis forced the solution in terms of the number of factors identified by the "Scree Test" method. The subsequent factor analysis was then orthogonal on rotation using the Varimax criterion (Nie, Hull et al., 1975:485) producing maximally uncorrelated factors, each with an eigenvalue greater than unity (Kim and Mueller, 1978:43). Factor scales were developed by utilizing items with a loading value equal to or greater than ±.40 on the factor where the highest loading occurred (Kim and Mueller, 1978:70). Scale scores were produced by summing the individual's responses to each of the selected items on a given factor. A standard score using a mean of zero and a standard deviation of one was then produced for each individual on each factor. The co-efficient alpha statistic (Kim and Mueller, 1978:63) was calculated to provide an estimate of scale reliability.

Respondents were classified into two groups: University of Alberta students and Athabasca University students and EPS mean scale scores were calculated for each group and compared. The selected variables from the DDP were correlated with the EPS scores across the entire sample.

Results of Analysis

Eleven factors were obtained from the principal components analysis with eigenvalues of 1.0 or greater. Cattell's "Scree Test" indicated that six factors should be retained for rotation. These six orthogonally rotated factors accounted for 35.6, 23.7, 10.8, 7.6 and 7.0 percent of the total variance respectively. Each factor was labelled in relation to the content of its assigned items which loaded ±.40. These items are presented together with the factor on which the highest loading occurred. One item, "to gain insight into my personal problems," loaded on both Factor 1 and Factor 5. The following six items were not included on any factor scale since the factor loadings did not meet the criterion equal to or greater than ±.40. Decimals are omitted from loadings.

	Loading	Factor
to share a common interest with a spouse or friend	355	5
to supplement a narrow previous education	335	1
to have a few hours away from responsibilities	382	1
to keep up with others	379	4
to escape an unhappy relationship	253	1
to provide contrast to my previous education	[388 [383	[1 [3

Description of Factors

Factor 1 was labelled Escape/Stimulation since it closely resembled a similarly labelled factor in the earlier studies (Morstain and Smart, 1974; Boshier, 1977). It contained five of the six items on Boshier's Factor 4, Intellectual Recreation, in his 1971 study; six of nine items included in Morstain and Smart's 1974 study Factor V; and six of twelve items in Boshier's 1977 study Factor 1. Items and their factor loadings (with decimal points omitted) appear below.

to get relief from boredom[1,2,3]	665
to satisfy an enquiring mind[1,2,3]	685
to stop myself becoming a vegetable[1,2,3]	650
*to gain insight into my personal problems	509
to escape television[2,3]	403
to provide a contrast to the rest of my life[1,2,3]	520
to get a break in the routine of home or work[1,2,3]	630

*Also loaded on Factor 5, Social Relationships, where it was found in two of the earlier studies. "To have a few hours away from responsibilities" loaded more heavily on this than any other factor but was not included. The factor loading was 382.

The individuals scoring high on this dimension seem to be enrolled in education courses to fulfill a felt need for stimulation, described in Boshier's 1971 study as Intellectual Recreation. Haag (1977) inferred that this factor measured aspects of life-chance (deficiency oriented) motivation versus life-space (growth oriented) motivation.

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[1]Boshier, 1971:13, Factor 4. Intellectual Recreation.

[2]Morstain and Smart, 1974:88. Factor V, Escape/Stimulation.

[3]Boshier, 1977:102. Factor 1, Escape/Stimulation.

Factor 2 was labelled Social Concern and closely resembles Boshier's 1971 study Factor I, Social Welfare, including all its items. Morstain and Smart's 1974 study Factor III, Social Welfare, was similar but included "to supplement a narrow previous education" which did not load on any factor in the present study. The items included in the factor in this study appear below.

to become more effective as a citizen[1,2,3]	406
*to acquire knowledge to help with other educational courses	404
to prepare for community service[1,2,3]	791
to gain insight into human relations[1,2,3]	621
to improve my ability to serve[1,2,3]	633
to improve my ability to participate in community work[1,2,3]	819

*This item is not included in any factor in Boshier's 1971 study and appeared in the Professional Advancement factor in Morstain and Smart's 1974 work and Boshier's 1977 study.

Items on this factor reflect a social concern and individuals scoring high on this dimension would seem to view their education as preparation for service to humanity. Although in Haag's study (1976), enrolling for reasons identified in these items was associated with the presence of neuroticism and absence of self-actualization, the items "to gain insight into my personal problems" and "to improve my social relationships" failed to load on the factor in this study, thus supporting Boshier's belief that the factor is more clearly life-space rather than life-chance oriented.

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[1]Boshier, 1971:11. Factor I, Social Welfare.
[2]Morstain and Smart, 1974:87. Factor III, Social Welfare.
[3]Boshier, 1977:103. Factor III, Social Welfare.

Factor 3 emerged as the Cognitive Interest factor identified in earlier studies. Three items were included which had formed Boshier's 1971 Factor 8, Morstain and Smart's 1974 Factor VI and Boshier's 1977 Factor V. In addition, the item "to escape the intellectual narrowness of my occupation" was included in Factor 3 in this study, and a new item, not present in the earlier version of the scale, "to learn just for the joy of learning" loaded heavily on Factor 1 in this study. The Factor 3 items appear below.

to seek knowledge for its own sake[1,2,3]	659
to satisfy an enquiring mind[1,2,3]	662
to escape the intellectual narrowness of my occupation	413
*to learn just for the joy of learning	817
to learn just for the sake of learning[1,2,3]	810

*New item in the 40 item version of the EPS.

The item "to escape the intellectual narrowness of my occupation" contributed to Boshier's 1971 Factor 9, Educational Compensation. The same item contributed to the Escape/Stimulation Factor V in Morstain and Smart's 1974 study, and appeared in the same dimension, Escape/Stimulation, in Boshier's 1977 Factor I. The item loaded 382 on the Escape Factor 1 in this study.

Boshier (1977:104) suggests that this factor is a reappearance of Houle's Learning Orientation and the similar findings in this study support such belief. Haag's findings (1976) showed high scorers on

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[1]Boshier, 1971:13. Factor 8, Cognitive Interest.
[2]Morstain and Smart, 1974:88. Factor VI, Cognitive Interest.
[3]Boshier, 1977:105. Factor V, Cognitive Interest.

the Cognitive Interest factor to be significantly more self-actualized, causing Boshier (1977:105) to deem this factor a manifestation of life-space motivation.

Factor 4 in this study contains six items and is labelled Professional Advancement. The items are consistent with those included in this factor in the earlier studies. The items are listed below.

to secure professional advancement[1,2,3]	716
to give me higher status in my job[1,2,3]	653
to keep up with competition[1,2,3]	519
to increase my job competence[1,2,3]	445
to help me earn a degree, diploma or certificate[2,3]	407
to meet formal requirements[1,3]	454

An item which loaded higher on this scale than any other, though not high enough to meet the criterion, included "to keep up with others" (factor loading 379). "To have a few hours away from responsibilities" loaded 336 on this factor and also 382 on the Escape/Stimulation Factor I in this study. Morstain and Smart (1974:87) describe the high scorers on this scale as individuals who "tend to perceive their education as highly job or vocationally oriented, leading to greater competence and higher status in their chosen occupation." Such individuals are also considered to be "highly motivated in relation to their occupation and to possess a strong competitive desire"

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[1]Bosher, 1971:12. Factor 5.

[2]Morstain and Smart, 1974:87. Factor IV.

[3]Boshier, 1977:103. Factor III.

(Morstain and Smart, 1974:87). In his 1971 study, Boshier identified individuals who were "other directed" and individuals who were "inner directed" with regard to Professional Advancement. Items on the "other directed" factor in the 1971 study have loaded high on the fifth factor in this present study labelled External Expectations, which corresponds with a similar factor in the 1974 Morstain and Smart study and Boshier's 1977 study. Boshier (1977:102) declares the Professional Advancement factor to be one which reflects a life-chance or deficiency motivation but recognizes that for some individuals the underlying motivation represented by this factor could be more properly considered to evidence movement towards self-actualization and would therefore be best described for some participants as life-space motivation (Boshier, 1977:94). If participation patterns in educational activity are more continuous for the life-space motivated individuals, as suggested by Haag (1976), then the high scorers on this factor would be likely to continue their participation in education courses in the future.

Factor 5 contains eight items and is labelled Social Relationships. It includes all the items in Boshier's 1971 Factor 2, Social Contact, and all the items in Morstain and Smart's 1974 Factor I, except "to share a common interest with a spouse or friend" which, in this study, loaded highest on this scale (355), but was below the factor criterion of ±.40 for inclusion. Boshier's 1977 study included many of these items in his Factor I Escape/Stimulation and he identified no factor similar to Factor 5 in the present study. Items included in Factor 5, Social Relationships, in the present study are

listed below.

to be accepted by others[2]	589
to fulfull a need for personal associations and friendships[1,2]	649
to participate in group activity[1,2]	632
to gain insight into my personal problems[2]	418
to become acquainted with congenial people[1,2]	600
to improve my social relationships[2]	758
to maintain or improve my social position[2]	527
to make new friends[1,2]	606

Boshier (1977:102) notes that Haag (1976) found individuals scoring high on the Social Contact factor in that study to be less self-actualized individuals. Across the studies, this factor is similar in meaning to Houle's "activity oriented" and Sheffield's "Sociability Orientation." The individuals scoring high on this factor have identified a need for improved interpersonal relationships, need for acceptance and are deficiency or life-chance motivated.

The sixth factor in this study is labelled External Expectations. It contains three items and closely resembles Boshier's 1971 Factor 3, Other-Directed Professional Advancement, and Morstain and Smart's 1974 Factor II, External Expectations, and Boshier's 1977 Factor IV External Expectations. The items included are listed below.

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[1]Boshier, 1971:11. Factor 2.

[2]Morstain and Smart, 1974:88. Factor I.

to carry out the recommendations of some authority[1,2,3]	678
to comply with the suggestions of someone else[1,2,3]	740
to comply with instructions from someone else[1,2,3]	866

Boshier (1977:104) believes this group of learners to be deficiency or life-chance motivated, based on Haag's 1976 findings where high scorers on this factor were more neurotic than low scorers as indicated by responses on the Eysenck Personality Inventory. Morstain and Smart (1974:86) refer to the high scorers on this factor as individuals who are "seeking to fulfill the expectations of others as opposed to their own intrinsic needs or desires."

Scale Reliability and Factor Intercorrelation

As an estimate of scale reliability, the coefficient alpha statistic (Kim and Mueller, 1978:64) was calculated for each factor scale. Results closely approximated the reliability index derived by Morstain and Smart in their 1974 study (p. 89). Factor intercorrelations were computed and the resulting Pearson Product-Moment correlations together with the alpha coefficients are presented in Table 22.

The scale reliability estimates range from $\alpha = .74$ (Professional Advancement) to $\alpha = .85$ (Social Relationships). These same factors represented the low and high values in the Morstain and Smart study (1974:89). Magnitude of intercorrelation also showed a wide

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[1]Boshier, 1971:12. Factor 3.

[2]Morstain and Smart, 1974:86. Factor II.

[3]Boshier, 1977:104. Factor IV.

Table 22

Pearson Product-Moment Correlations of Six EPS Scales and Estimate of Scale Reliability (Coefficient Alpha)

	Escape/ Stimulation	Social Concern	Cognitive Interest	Professional Advancement	Social Relationships	External Expectations
Escape/ Stimulation coeff. α = .81	-	.145**	.322***	-.150**	.434***	-.017
Social Concern coeff. α = .81		-	.163**	.288***	.379***	.0007
Cognitive Interest coeff. α = .80			-	.081*	.142**	-.168**
Professional Advancement coeff. α = .74				-	.241***	.298***
Social Relationships coeff. α = .85					-	.206***
External Expectations coeff. α = .80						-

* Significant at p < .1
** Significant at p < .05
*** Significant at p < .01

range among the six scales. Escape/Stimulation and External Expectations showed a very weak negative correlation ($r = -0.017$) while Social Relationships and Escape/Stimulation correlated $r = 0.434$ ($p < .01$). Other correlations significant at the $p < .01$ included those between Escape/Stimulation and Cognitive Interest, Escape/Stimulation and Social Relationships, Social Concern and Professional Advancement, Social Concern and Social Relationships, Professional Advancement and Social Relationships, Professional Advancement and External Expectations, Social Relationships and External Expectations.

Correlations significant at the $p < .05$ included Escape/Stimulation and Social Concern, Escape Stimulation and Professional Advancement (negative relationship), Social Concern and Cognitive Interest, Cognitive Interest and Social Relationships.

Correlations significant at $p < .1$ included Cognitive Interest and Professional Advancement and this was a weak negative relationship.

The motivation towards Escape/Stimulation seemed most closely associated with the Cognitive Interest and Social Relationships factors and was correlated negatively at $p < .1$ level of significance with the Professional Advancement factor. On the other hand, the Social Concern factor was correlated positively with the Professional Advancement ($p < .01$) and Social Relationships factor ($p < .01$). Cognitive Interest showed a positive correlation to Social Relationships ($p < .05$) and negative correlation to both External Expectations ($p < .05$) and Professional Advancement ($p < .1$), while Professional Advancement was strongly correlated with Social Relationships ($p < .01$)

and External Expectations ($p < .01$). The latter two factors also showed a strong intercorrelation ($p < .01$).

The emerging intercorrelations can be justified on the basis of a possible common underlying psychological motivation expressed by the items on factor scales: Escape/Stimulation, Cognitive Interest and Social Relationships. A similar type of common thread could be argued for the intercorrelations that exist between Professional Advancement and External Expectations. The negative correlation between Cognitive Interest and both External Expectations and Professional Advancement might suggest that enrollees studying because of external pressures or needs to compete in the work world are not motivated primarily by the "love of learning."

SUMMARY OF THE EDUCATION PARTICIPATION SCALE DATA

The single most important motivational factor for this sample of Registered Nurses who are part-time students was Escape/Stimulation accounting as it did for 35.6 percent of the variance. Haag (1976) believed the high scorers on this factor to be less self-actualized and Boshier (1977) believed that the factor measured aspects of life-chance (deficiency oriented) motivation.

Social Concern was the second most important motivating factor accounting for 23.7 percent of variance. While Haag (1976) saw this factor associated with the presence of neurotocism and absence of self actualization, the items "to gain insight into my personal problems" and "to improve my social relationships" failed to load on the factor in this study, thus supporting Boshier's belief that the

factor is more clearly life-space than life-chance oriented.

Cognitive Interest accounted for 15.4 percent of the variance and both Haag (1976) and Boshier (1977) believe high scorers on this factor to be more self-actualized and therefore life-space oriented.

Professional Advancement accounted for 10.8 percent of variance, and as seen by Boshier (1977) could represent either life-chance (deficiency) or life-space (self-actualization) motivation. It is not clear in this study which psychological underpinning is more operative for the group of Registered Nurse students.

Both the Social Relationships and External Expectations factors are life-chance (deficiency) oriented and represent the motivation orientation of fewer learners in this sample (7.6 and 7.0 percent respectively).

Across the sample, it appears that life-chance (deficiency) motivation rather than life-space (self-actualization) motivation operates to influence part-time learners who are Registered Nurses.

RELATIONSHIPS BETWEEN DDP AND EPS DATA

In this study, no hypothesis testing was undertaken, however results are reported as appropriate at the $p < .1$, $p < .05$, or $p < .01$ level where such results occur.

t-Tests for Nominal Variables

The t-test is used as a basis of interpretation for the difference between two means (Popham, 1973:125). t values were computed for six nominal DDP variables to assist in interpreting the differences in means in relation to the factors one to six derived from the Education

Participation Scale data. Differences were obtained on only four out of six factors and the results are shown in Tables 23 through 27 following. Such findings must be considered tentative on the basis of occurrance by chance alone.

The group of employed nurses presented a lower mean on the Escape/Stimulation factor than nurses not employed while studying as shown in Table 23. This difference, .44 (0.004 on the 2-tail probability estimate with $p < .01$) might suggest that nurses who are employed while studying have ample "stimulation" in their lives and their participation in university courses is motivated by a different psychological orientation.

Table 23

t-Test Results for Factor 1 (Escape/Stimulation) and Employment as an RN while Studying

					Pooled Variance Estimate		
	n	Mean	S.D.	Stand. Error	T value	df	2-tail prob.
Employed	109	1.64	0.60	0.06	-2.93	126	0.004
Not employed	19	2.08	0.57	0.13			

In Table 24 nurses wanting a BScN degree showed a lower mean on the Cognitive Interest factor than those not wanting a BScN degree. The difference in means of .39, associated with a probability of 0.041 on the 2-tail estimate ($p < .05$) suggests that nurses wanting a BScN would seem to be motivated by reasons other than "learning just for the joy of learning" and some other psychological underpinning supports their motivation.

Table 24

t-Test Results for Factor 3 (Cognitive Interest) and Desire to Obtain a Baccalaureate Degree

	n	Mean	S.D.	Stand. Error	Pooled Variance Estimate T value	df	2-tail prob.
Wants BScN	111	2.84	0.68	0.07	1.19	124	0.041
Does not want BScN	15	3.23	0.63	0.16			

Two variables accounted for differences in means on Factor 4, Professional Advancement. In Table 25, nurses studying at Athabasca show a lower mean on this factor than nurses studying at the University of Alberta. The difference in means was 0.26 (and this difference was associated with the 2-tailed probability of 0.025). Since many nurses in the Athabasca sample live away from large urban areas, the collegial competitiveness (which may be a component of Professional Advancement motivation) existing in urban settings could be less imperative for them.

Table 25

t-Test Results for Factor 4 (Professional Advancement) and Institution of Enrollment

	n	Mean	S.D.	Stand. Error	Pooled Variance Estimate T value	df	2-tail prob.
Athabasca	54	2.65	0.72	0.09	-2.28	126	0.025
University of Alberta	74	2.91	0.55	0.06			

A second variable associated with Factor 4, Professional Advancement, is the nurse's desired place of enrollment. Those wishing to enroll at University of Alberta showed the higher mean on this factor as presented in Table 26. The difference in means was .31 (shown as 0.042 on the 2-tail probability estimate with $p < .05$). These nurses are likely to live in the City of Edmonton and may be influenced by competitive behaviours of colleagues and other practitioners in the urban health care system.

Table 26

t-Test Results for Factor 4 (Professional Advancement) and Desired Place of Enrollment

					Pooled Variance Estimate		
	n	Mean	S.D.	Stand. Error	T value	df	2-tail prob.
Wishes to enroll at University of Alberta	92	2.88	0.59	0.06	2.06	110	0.042
Wishes to enroll elsewhere	20	2.57	0.72	0.16			

In Table 27 the differences are shown in mean for nurses wishing to enroll at University of Alberta and those wishing to enroll elsewhere, with Factor 6, External Expecations. Nurses wishing to enroll "elsewhere" showed a lower mean with a difference of 0.31 (0.054 on the 2-tail estimate, $p < .05$). It is possible that enrolling at University of Alberta might reflect pressure from employer expectations for the urban group which could form a large measure of the

Table 27

t-Test Results for Factor 6 (External Expectations) and Desired Place of Enrollment

	n	Mean	S.D.	Stand. Error	Pooled Variance Estimate T value	df	2-tail prob.
Wishes to enroll at University of Alberta	92	1.46	0.70	0.07	1.95	100	0.054
Wishes to enroll elsewhere	20	1.15	0.33	0.07			

"external" expectations motivation of the nurses in this group. Those wishing to enroll "elsewhere" could be responding to motivation more adequately reflected by the other scales.

Pearson Correlation between Continuous Demographic Variables and Factors One through Six

Ten continuous demographic variables were correlated with Factors 1 through 6 derived from the Educational Participation Scale data. Five of these continuous DDP variables represented mean scores on RN examinations. The other five included age, number of dependents (adults and children) supported by the enrollee while studying, year of graduation from the initial RN program and number of years in active practice. Only RN scores and number of years of practice showed significant correlations with EPS factors. Such findings must be considered tentative on the basis of occurrance by chance alone. The correlation coefficients are shown in Table 28.

Age correlated negatively with External Expectations ($r = -0.130$, $p < .1$). As the enrollees become older they are less motivated by external expectations.

Having dependent children correlated negatively with Escape/Stimulation ($r = -0.116$, $p < .1$). Enrollees with dependent adult responsibilities correlated negatively with External Expectations ($r = -0.123$, $p < .1$).

Mean scores of enrollees on the RN examination in Medical Nursing correlated negatively with four EPS factors: with Social Concern ($r = -0.125$, $p < .1$); with Professional Advancement ($r = -0.24$, $p < .01$); with Social Relationships ($r = -0.138$, $p < .05$); and with External Expectations ($r = -0.168$, $p < .1$). Mean scores of enrollees

Table 28

Pearson Correlations for Six EPS Factors with Ten DDP Continuous Variables (n = 128)

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Age	-0.064	0.084	-0.021	-0.015	-0.067	-0.130*
Dependent children	-0.116*	0.005	-0.042	0.039	0.092	-0.041
Dependent adults	-0.018	-0.064	0.09	0.05	-0.067	-0.123*
Year of graduation	-0.036	-0.014	-0.008	-0.016	0.07	0.012
Years of practice	-0.11*	-0.002	-0.074	0.087	-0.112*	0.172**
RN Exam Scores						
Medical nursing	0.022	-0.125*	0.043	-0.24***	-0.138**	-0.168**
Surgical nursing	-0.02	-0.184***	0.079	-0.307***	-0.204***	-0.194***
Nursing of children	-0.028	-0.17**	0.054	-0.19***	-0.156**	-0.146**
Obstetric nursing	0.01	-0.101	0.065	-0.242***	-0.15**	-0.176**
Psychiatric nursing	-0.05	-0.116*	0.066	-0.206***	-0.125*	-0.04*

* p .1
** p .05
*** p .01

Factor 1 Escape/Stimulation
Factor 2 Social Concern
Factor 3 Cognitive Interest
Factor 4 Professional Advancement
Factor 5 Social Relationships
Factor 6 External Expectations

on the RN examination in Surgical Nursing correlated with the same four EPS factors: with Social Concern ($r = -0.184$, $p < .01$); with Professional Advancement ($r = -0.307$, $p < .01$); with Social Relationships ($r = -0.204$, $p < .01$); and with External Expectations ($r = -0.194$, $p < .01$).

The mean scores resulting from RN examinations in Nursing of Children correlated negatively with four EPS factors as follows: Social Concern ($r = -0.17$, $p < .05$); Professional Advancement ($r = -0.19$, $p < .01$); Social Relationships ($r = -0.156$, $p < .05$); and External Expectations ($r = -0.146$, $p < .05$).

The RN mean scores in Obstetric Nursing correlated negatively with three of the EPS factors as follows: Professional Advancement ($r = -0.242$, $p < .01$); Social Relationships ($r = -0.15$, $p < 05$); and External Expectations ($r = -0.176$, $p < .05$).

The RN mean scores in Psychiatric Nursing correlated negatively with four EPS factor scale scores as follows: Social Concern ($r = -0.116$, $p < .1$); Professional Advancement ($r = -0.206$, $p < .01$); Social Relationships ($r = -0.125$, $p < .1$); and External Expectations ($r = -0.04$, $p < .1$).

The only positive correlations that emerged between RN examination scores and EPS factors were on the Cognitive Interest factor and between Medical and Obstetric Nursing examination scores and the Escape/Stimulation factor. All of these correlations were weak and lacked a supporting probability.

From these findings it would seem that success on RN examinations is negatively correlated to four motivation orientations:

Social Concern, Professional Advancement, Social Relationships and External Expectations. The Cognitive Interest factor shows only weak, positive correlations with RN examination scores and the Escape/Stimulation factor shows two positive and three negative correlations, all weak.

Years of active practice in nursing correlated positively with External Expectations ($r = 0.172$, $p < .05$); and negatively with Escape/Stimulation ($r = -0.11$, $p < .1$) and Social Relationships ($r = -0.11$, $p < .1$). These findings suggest that enrollees with more years of practice in nursing are indicating a motivational response to External Expectations (possibly employer pressure or professional pressure to 'keep up'). These same enrollees do not, however, have an Escape motivation for their studying, nor do they recognize university courses as a way to increase their Social Relationships.

One-Way Analysis of Variance for Nine Demographic Variables Comprising Groups

Popham and Sirotnik (1973:152) describe analysis of variance in its simplest form as a statistical method for testing differences between the means of two or more groups.

Nine variables from the DDP data were subject to one-way analysis of variance (Nie, Hull et al., 1975:422) with each of the EPS factor scores. The DDP variables included means of support while enrolled in university courses, marital status, place of residence, employment status while studying, position while employed, plans for full-time enrollment, commitment to full-time enrollment, major

outcome expected from obtaining a BScN, beliefs about having a BScN and beliefs about the need for a BScN. Of these variables, the latter five showed difference between group means with a probability either $p < .1$, $p < .05$ or $p < .01$. Such findings must be considered tentative on the basis of occurrance by chance alone. These results are reported in Tables 29-41 following.

In Table 29, position while employed is presented with Factor 2, Social Concern. There is a difference in means between staff nurses and the other two groups. The difference in mean between staff nurses and head nurse-supervisors is .5 ($p < .01$). These findings suggest that "improving their ability to serve" is a motivating force for the staff nurse group.

Table 29

Position While Employed with Factor Two, Social Concern

Analysis of Variance

Source	df	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between groups	2	6.22	3.11	5.96	0.0035
Within groups	108	56.43	0.52		
Total	110	62.65			

Group	Count	Mean	S.D.
Group 1: staff nurse	71	2.70	0.78
Group 2: head or supervisor	19	2.19	0.58
Group 3: other	21	2.21	0.64
Total	111	2.52	0.75

Table 30 shows position when employed with Factor 4, Professional Advancement. There is a difference between staff nurse and head nurse groups and the "other" groups. The difference in mean was .47 ($p < .01$). Those enrollees comprising the "other" group would seem to be motivated by psychological orientations different from those tapped by the Professional Advancement scale.

Table 30

Position While Employed with Factor Four, Professional Advancement

Analysis of Variance

Source	df	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between groups	2	3.60	1.80	4.41	0.0144
Within groups	108	44.04	0.41		
Total	110	47.64			

Group	Count	Mean	S.D.
Group 1: staff nurse	71	2.87	0.59
Group 2: head or supervisor	19	2.83	0.73
Group 3: other	21	2.40	0.72
Total	111	2.78	0.66

Table 31 shows position while employed with Factor 6, External Expectations. There is a difference in mean (.49, $p < .01$) between the head nurse-supervisor group and the staff nurse and 'other' groups. As might be expected, nurses in administrative-leadership positions who are not prepared academically may be experiencing the pressure of external expectations as a motivation for their learning.

Table 31

Position While Employed with Factor Six, External Expectations

Analysis of Variance

Source	df	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between groups	2	3.58	1.79	4.47	0.0136
Within groups	108	43.19	0.40		
Total	110	46.77			

Group	Count	Mean	S.D.
Group 1: staff nurse	71	1.32	0.47
Group 2: head or supervisor	19	1.81	0.91
Group 3: other	21	1.40	0.79
Total	111	1.42	0.65

In Table 22, plans for full-time enrollment are shown with Factor 2, Social Concern. The group with plans for 1979-80 enrollment showed the highest mean on this factor (3.33, $p < .01$). The groups desiring full-time enrollment within five years and within three years showed the next highest means. Those enrollees planning full-time study in the 1979-80 term seem strongly motivated by the Social Concern factor "improving their ability to serve."

Table 32

Plans for Full-Time Enrollment with Factor Two, Social Concern

Analysis of Variance

Source	df	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between groups	4	11.04	2.76	5.64	0.0004
Within groups	106	51.86	0.49		
Total	110	62.89			

Group	Count	Mean	S.D.
Group 1: presently	23	2.24	0.64
Group 2: 1979-80	14	3.33	0.61
Group 3: within 3 years	36	2.52	0.82
Group 4: within 5 years	19	2.58	0.64
Group 5: other	19	2.45	0.65
Total	111	2.56	0.76

In Table 33, plans for full-time enrollment are shown with Factor 3, Cognitive Interest. The group indicating "other" (some indefinite time) showed the lowest mean, different from the group planning enrollment within five years, the difference being .64 ($p < .05$). The reasons for enrollment would seem to be related to psychological orientations other than Cognitive Interest for enrollees planning enrollment at some indefinite future time.

Table 33

Plans for Full-Time Enrollment with Factor Three, Cognitive Interest

Analysis of Variance

Source	df	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between groups	4	4.53	1.13	2.58	0.0414
Within groups	106	46.51	0.44		
Total	110	51.04			

Group	Count	Mean	S.D.
Group 1: presently	23	2.91	0.56
Group 2: 1979-80	14	2.81	0.53
Group 3: within 3 years	36	2.93	0.68
Group 4: within 5 years	19	3.08	0.69
Group 5: other	19	2.44	0.79
Total	111	2.85	0.68

Table 34 shows planned time of enrollment with Factor 4, Professional Advancement. The "other" group (those who are indefinite about plans for enrollment) show the lowest mean and differ from the group desiring enrollment in 1979-80 (difference in mean is .68, $p < .05$). The group desiring enrollment in 1979-80 are more motivated by professional advancement considerations than the individuals planning enrollment at some other time.

Table 34

Plans for Full-Time Enrollment with Factor Four, Professional Advancement

Analysis of Variance

Source	df	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between groups	4	4.27	1.07	3.00	0.0216
Within groups	106	37.70	0.36		
Total	110	41.97			

Group	Count	Mean	S.D.
Group 1: presently	23	2.94	0.52
Group 2: 1979-80	14	3.17	0.43
Group 3: within 3 years	36	2.81	0.62
Group 4: within 5 years	19	2.75	0.66
Group 5: other	19	2.48	0.66
Total	111	2.82	0.62

Table 35 shows commitment to full-time enrollment with Factor 1, Escape/Stimulation. The group who were "fairly sure" about their commitment to full-time enrollment showed a difference from those who were unsure (.36) and those who were very sure (.42, $p < .001$). The highest mean found for the three groups was that for the "fairly sure" category. It may be conjectured that as students go through the process of developing commitment to full-time study, the impact of motivating factors may vary throughout the cycle.

Table 35

Commitment to Full-Time Enrollment with Factor One, Escape/Stimulation

Analysis of Variance

Source	df	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between groups	2	4.06	2.03	6.73	0.0018
Within groups	109	32.90	0.30		
Total	111	36.96			

Group	Count	Mean	S.D.
Group 1: very sure	49	1.52	0.53
Group 2: fairly sure	39	1.94	0.57
Group 3: unsure	24	1.60	0.56
Total	112	1.68	0.58

Table 36 shows commitment to full-time enrollment with Factor 3, Cognitive Interest. There is a difference of .43 ($p < .05$) between those enrollees who are unsure and those who are fairly sure about their planned enrollment, in relation to motivation arising from Cognitive Interest orientations. Those who are unsure about their commitment to full-time study may be responding to a variety of motivating factors, none of which are clearly outstanding for them.

Table 36

Commitment to Full-Time Enrollment with Factor Three, Cognitive Interest

Analysis of Variance

Source	df	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between groups	2	2.81	1.40	3.13	0.0475
Within groups	109	48.81	0.45		
Total	111	51.62			

Group	Count	Mean	S.D.
Group 1: very sure	49	2.82	0.63
Group 2: fairly sure	39	3.02	0.67
Group 3: unsure	24	2.58	0.74
Total	112	2.84	0.68

Table 37 shows commitment to full-time enrollment with Factor 4, Professional Advancement. There is a difference in mean between those who are very sure about their plans and the other two groups. The difference in mean between those who are very sure and those who are unsure is .43 ($p < .01$). Individuals who are very sure about their plans for enrollment would seem to be motivated by the psychological orientations addressed on the Professional Advancement scale.

Table 37

Commitment to Full-Time Enrollment with Factor Four, Professional Advancement

Analysis of Variance

Source	df	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between groups	2	4.09	2.04	5.84	0.0039
Within groups	109	38.16	0.35		
Total	111	42.24			

Group	Count	Mean	S.D.
Group 1: very sure	49	3.04	0.48
Group 2: fairly sure	39	2.68	0.02
Group 3: unsure	24	2.62	0.74
Total	112	2.83	0.62

Table 38 shows commitment to full-time enrollment with Factor 5, Social Relationships. There is a difference between those enrollees who are fairly sure about their commitment and the other two groups. Difference between the fairly sure and the very sure is .29 ($p < .01$). Those who are fairly sure about their commitment to enroll would seem to have some elements of the psychological orientation related to social relationships associated with their motivation.

Table 38

Commitment to Full-Time Enrollment with Factor Five, Social Relationships

Analysis of Variance

Source	df	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between groups	2	2.00	1.00	4.95	0.0088
Within groups	109	22.04	0.20		
Total	111	24.04			

Group	Count	Mean	S.D.
Group 1: very sure	49	1.23	0.40
Group 2: fairly sure	39	1.52	0.51
Group 3: unsure	24	1.26	0.44
Total	112	1.33	0.47

Table 39 shows beliefs about major outcome of obtaining a BScN with Factor 3, Cognitive Interest. There is a difference in mean between those enrollees who see improved working conditions or salary as a major outcome and those who see opportunity to change field of practice as a major outcome. The difference is .57 ($p < .05$). Motivation arising from Cognitive Interest orientation would seem to be stronger for those wishing to change field of practice than for enrollees stating other beliefs about outcome of obtaining the BScN degree.

Table 39

Beliefs about Major Outcome of Obtaining a BScN with Factor Three, Cognitive Interest

Analysis of Variance

Source	df	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between groups	3	4.15	1.38	3.25	0.0247
Within groups	109	46.45	0.43		
Total	112	50.61			

Group		Count	Mean	S.D.
Group 1:	improved conditions	16	2.41	0.65
Group 2:	satisfaction	41	2.79	0.66
Group 3:	change field	40	2.99	0.70
Group 4:	personal satisfaction	16	2.98	0.52
Total		113	2.83	0.67

In Table 40, beliefs about major outcome of obtaining a BScN are shown with Factor 4, Professional Advancement. Enrollees seeking more challenging or satisfying work showed the highest mean with those enrollees seeking personal satisfaction having the lowest mean. The difference was .47 ($p < .1$). Enrollees seeking more challenging work as a major outcome of obtaining a BScN would seem to be responding to the motivational orientation identified by the Professional Advancement scale.

Table 40

Beliefs about Major Outcome of Obtaining a BScN with Factor Four, Professional Advancement

Analysis of Variance

Source	df	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between groups	3	2.65	0.88	2.40	0.0718
Within groups	109	40.05	0.37		
Total	112	42.70			

Group	Count	Mean	S.D.
Group 1: improved conditions	16	2.79	0.64
Group 2: more challenging work	41	2.93	0.63
Group 3: change field	40	2.86	0.55
Group 4: personal satisfaction	16	2.46	0.65
Total	113	2.82	0.62

Table 41 shows beliefs about need for the BScN degree with Factor 2, Social Concern. Enrollees indicating "professional nurses do need a Baccalaureate degree" showed the highest mean while enrollees indicating "do not need" showed the lowest mean. The difference was .78 ($p < .001$). This would indicate that enrollees seeing a BScN as necessary for professional nurses also are motivated by those psychological orientations identified through the Social Concern scale.

Table 41

Beliefs about Need for BScN with Factor Two, Social Concern

Analysis of Variance

Source	df	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between groups	4	9.40	2.35	4.53	0.0019
Within groups	115	59.62	0.52		
Total	119	59.02			

Group		Count	Mean	S.D.
Group 1:	do not need	20	2.04	0.68
Group 2:	government	7	2.71	0.77
Group 3:	do need	40	2.82	0.68
Group 4:	AARN	9	2.20	0.93
Group 5:	only teaching	44	2.49	0.72
Total		120	2.52	0.76

SUMMARY OF RELATIONSHIPS BETWEEN DDP AND EPS DATA

t-Tests, Pearson Correlations and one-way analysis of variance procedures were used to identify possible relationships existing between DDP and EPS data. These relationships are discussed below.

Four DDP variables were found to be meaningfully associated with Factor 1, Escape/Stimulation. These variables were: employment while studying, dependent children, years of nursing practice and commitment to enroll. Nurses who were employed while learning, who had dependent children, who had increasing years of nursing practice and who were fairly sure of their enrollment plans were less likely to be motivated by Escape/Stimulation related reasons as measured by this factor. Their motivation would be associated with other psychological orientations.

Factor 2, Social Concern, was associated with three variables: enrollee position while working and studying, plans for enrollment, and belief about the need for a BScN degree. RN examination scores were negatively associated. These findings suggest that nurses who were employed as staff nurses while studying, who wished enrollment in 1979-80 and who believed that professional nurses do need a baccalaureate degree were responding to the motivational force of Social Concern as identified by this factor. These variables would seem to support the belief that Social Concern represents motivation which is essentially life-space (self-actualization) motivation. Since RN examination scores showed a strong negative correlation with this and three other factors, it is possible that some Escape/Stimulation and Cognitive Interest motivation might be operating

for these nurses.

Factor 3, Cognitive Interest, was associated with four variables: desire to obtain a baccalaureate degree, plans for enrollment, commitment to plans for enrollment and belief about major outcome of obtaining a BScN degree. Nurses who did not want a baccalaureate degree showed higher motivation associated with this scale. Those fairly sure about enrollment within five years showed greater motivation associated with this scale and nurses who believed that changing field of practice would be a major outcome of obtaining a BScN showed increased motivation. Again, these variables would seem to support the belief that Cognitive Interest represents motivation which is essentially life-space oriented. This was the only factor where all RN scores showed a positive correlation although the association was a very weak one.

Factor 4, Professional Advancement, was associated with six variables in addition to RN examination scores. The six variables included institution of enrollment for part-time study, desired place of full-time enrollment, employment position while studying, plans for full-time study, commitment and belief about major outcome resulting from obtaining a BScN. RN examination scores were negatively correlated with this and three other factors, indicating that these nurses might be responding to some Escape/Stimulation and/or Cognitive Interest motivation. Nurses who were part-time students at Athabasca University were less motivated by psychological orientations measured on the Professional Advancement scale than nurses enrolled in part-time study at the University of Alberta.

Those nurses who desired full-time enrollment at the University of Alberta showed higher means associated with this scale. Nurses employed in staff or head-nurse positions showed higher means than "others." Nurses wishing enrollment in 1979-80 and very sure of their plans showed a higher mean associated with this scale and nurses who sought more satisfying or challenging work as the major outcome of obtaining the BScN degree showed a higher mean. The motivational underpinning of the Professional Advancement scale is neither clearly life-chance nor life-space oriented as reflected by the associated DDP variables in this study.

Factor 5 was associated with two variables, years of practice in nursing and commitment to enroll, in addition to RN examination scores. Nurses with increasing years of practice and who are fairly sure of their commitment to enroll are studying for reasons not related to the motivation orientation measured by the Social Relationships scale. As can be seen in the discussions of Factor 6 following, these nurses may be responding more to the motivation identified in the External Expectations scale. Success on RN examinations showed a negative association with Social Relationships. Other motivation underlies the psychological orientation of these nurses.

Factor 6, External Expectations, was meaningfully associated with RN scores and with six other variables. These variables include: desire to enroll at the University of Alberta for full-time study, age, number of dependent adults, years of active practice and employment position while studying. Success on RN examinations was correlated negatively with Factor 6 as with three other factors. Nurses who

wish to enroll full-time at the University of Alberta and who have been employed as a head-nurse or supervisor show a higher mean score on this factor. While years of active practice in nursing is positively associated with External Expectations, increasing age is negatively associated with the same factor. It is possible that the nurses who have been practising for a number of years (the mean for the sample was seven years) who are in their early middle age (the mean age for the sample was 33 years) and who are working in a head nurse or supervisor position are responding particularly to the external expectations identified by this factor, or an alternative undiscovered, underlying, unseen variable.

Implications of These Results

The Registered Nurse who is employed while studying, who has dependent children, who is committed to enroll and has increasing years of nursing practice will more likely be motivated by psychological orientations other than Escape/Stimulation, although this emerged as the strongest motivating factor overall. Program planners might do well to appeal to the Social Concern and Cognitive Interest motivation orientations for these learners. Course content should be academically challenging to meet the Cognitive Interest orientation while essentially practical in application so that the nurse perceives the possibility of improving her helping skills, thus fulfilling the expectations of the Social Concern motivation orientation. Since both of these motivational factors are life-space oriented, courses should be so designed as to allow learners the maximum possibility

for self-growth. The DDP variables associated with Factor 2, Social Concern and Factor 3, Cognitive Interest support these suggestions.

Nurses employed in staff or head-nurse positions, seeking immediate enrollment and expecting more challenging or satisfying work as an outcome of obtaining a degree showed higher means on the Professional Advancement factor, which represents clearly neither life-chance nor life-space motivation. Considered with the group of nurses scoring high on Factor 6, External Expectations, programming for these students should stimulate learning activity related to their present and future employment expectations, allowing the maximum individuality in learning through such strategies as contract learning and independent modules.

The strong negative association of RN scores with all motivational factors (except Cognitive Interest where the association was very weak) suggests that using the scores as a selection device may predict academic success but provides no guidance to course planners in identifying learner motivation.

Chapter 5

SUMMARY AND DISCUSSION

At the outset of this study a problem was identified related to post-RN baccalaureate education for Registered Nurses in Alberta. It was determined that more nurses apply for places in the University of Alberta Faculty of Nursing post-RN program than can be accommodated each year. At the same time, increasing numbers of Registered Nurses seek opportunity for part-time university study, either as Special Students at the University of Alberta Faculty of Nursing, or with Athabasca University. It was believed that within this pool of part-time learners, substantial numbers of potential post-RN candidates exist, putting further pressure on the limited post-RN baccalaureate program admission quota.

Registered Nurses studying on a part-time basis or seeking admission to the baccalaureate program are adult learners. The literature of adult education, reviewed in Chapter 2, reiterates the need for educators to "know their learners." Very little is known about the characteristics of individuals who form the large group of Registered Nurses studying on a part-time basis at Athabasca University and University of Alberta. The purpose of this study was, therefore, to identify some specific demographic characteristics of the Registered Nurses studying part-time at two Alberta universities; to determine some motivational factors influencing these Registered Nurses to study and finally to determine whether any relationships

exist among the identified characteristics that would assist program planners and administrators in meeting the learning needs of this group and other similar groups of adult learners who are Registered Nurses.

A two-part questionnaire was distributed to 229 Registered Nurses enrolled in part-time study at two Alberta universities between July 1, 1977 and June 30, 1978. Questionnaires (with stamped self-addressed envelope enclosed) were mailed to 117 Athabasca University enrollees and 112 University of Alberta, Faculty of Nursing enrollees. A prompt letter was sent to the entire sample three weeks after the initial mailing. The first part of the questionnaire, the Demographic Data Profile, consisted of questions which yielded 28 variables providing personal data, academic data, professional data and data related to plans for full-time study and beliefs about baccalaureate education for professional nurses. An opportunity was provided at the end of the Demographic Data Profile for respondents to write comments if so inclined.

The second part of the questionnaire utilized the Education Participation Scale developed by Boshier (1971, 1976, 1977) as a measure of motivation orientation to continuing education. Forty items, arranged on a four-choice Likert-type scale, allowed the respondent to indicate that the item content contributed to their learning motivation with much, moderate, little or no influence.

A total of 147 questionnaires were returned (64 percent). Of this number, 67 were received from Athabasca enrollees and 80 from University of Alberta enrollees. Four male respondents were

eliminated from the sample. Two had already completed a baccalaureate degree and the two remaining male respondents constituted less than two percent of the sample. In Alberta, male Registered Nurses constitute approximately one percent of all Registered Nurses. It was further believed that due to male-female motivation differences towards continuing learning, the inclusion of a small number of males would result in a non-homogenous sample. Of the total questionnaires returned (147), 133 usable questionnaires were retained for further analysis.

Descriptive statistics were obtained and compared for the initial response group and for the response group returning questionnaires in the period one week following the mailing of the prompt letter. No differences were noted between the two groups and therefore the sample was deemed a homogenous one. Descriptive statistics were then compiled for the group of Athabasca respondents and for the University of Alberta respondents. A comparison was drawn between the two groups and tables showing the comparative group results are provided with discussion in Chapter 4. While slight variations in mean and standard deviation occurred on some variables, no significant differences were noted and the similarity of the two groups was judged sufficient to consider the sample a homogenous one for further analysis.

A profile of the part-time learner based on data from the DDP potrays the enrollee in the following way:

She is married, with no children nor adult dependents, lives in Edmonton, is 33 years of age, graduated from a hospital

diploma school of nursing since 1968 and has been engaged in the active practice of nursing for seven years since graduation. Her RN scores ranged between 500-549 and she has not completed any university courses since 1974. She works full-time in a staff nurse position and she believes that a degree is necessary only for a nurse working in teaching, supervision or public health. She wants to obtain a BScN in order to obtain more challenging work or to change field of practice. She wishes to enroll full-time at the University of Alberta within three years.

While this profile represents the findings descriptive of the total sample, some modifications are necessary as indicated by the data presented in Tables 1-21, where the learners in the Athabasca and University of Alberta subsamples are considered separately.

Differences between the two groups, as described in Chapter 4, involved marital status, place of residence, employment while studying and financing of studying, RN mean scores and beliefs about major outcome of obtaining a baccalaureate degree. The respondents provided over 60 written comments to the question "Are there any comments you would like to make?" The responses are reported verbatim (excluding the letters) in Appendix IV of this study. Concerns expressed related to accessibility of post-RN courses, requests for off-campus courses, alternatives to full-time study and discontent with the limited enrollment possible due to a quota on admissions in the post-RN program. Other comments referred to the question about need for professional nurses to have a baccalaureate degree and general concerns about the whole system of nursing education.

The analysis of the Education Participation Scale was presented in Chapter 4. Data from 127 respondents were subject to factor analysis and orthogonal rotation. Eleven factors were obtained with eigenvalues of 1.0 or greater and six factors resulted from the forced solution. Each factor was labelled in relation to the content of its assigned items as follows: Escape/Stimulation, Social Concern, Cognitive Interest, Professional Advancement, Social Relationships and External Expectations. The factors accounted for 35.6, 23.7, 15.4, 10.8, 7.6 and 7.0 percent of the variance respectively. The factors which emerged were similar to those emerging in previous studies with adult learners utilizing the EPS scale. These factors are believed to measure motivation which may be life-chance (deficiency) oriented or life-space (self-actualization) oriented. A scale reliability index was derived by calculating the co-efficient alpha statistic for each factor scale and the estimates ranged from $\alpha = .74$ to $\alpha = .85$. Factor intercorrelations were computed and Pearson Product-Moment correlations calculated, resulting in some patterns emerging among the correlations. The correlations shown in Table 22 and the patterns described in the text suggest the possibility of common underlying motivation expressed in the choice of items on the correlated scales.

The summary of the Education Participation Scale data provided in Chapter 4 identifies Escape/Stimulation as the single most important motivational factor for this sample of Registered Nurses, accounting as it did for 35.6 percent of the variance. Earlier studies suggested that high scorers on this factor experienced

motivation that was deficiency or life-chance oriented.

Social Concern and Cognitive Interest, the second and third factors of importance, accounted for 23.7 and 15.4 percent of the variance respectively. Both factors are believed to be life-space rather than life-chance oriented. Boshier (1977:96) suggests that the life-space oriented learners are those whose participation in learning activities over time will be more continuous: "Life space motivated participants are continuing learners and never satiated." This motivational group might well form a pool of potential graduate students and clinical researchers so necessary to future growth in the profession of nursing.

Professional Advancement accounted for 10.8 percent of variance and could represent either life-chance of life-space motivation. Since there was a strong relationship between this factor and one other life-space but two other life-chance factors, it would seem more likely life-chance oriented in this population sample.

Both the Social Relationships and External Expectations factors are life-chance (deficiency) oriented and represent the motivational orientation of fewer learners in this sample.

Across the sample, it appears that life-chance (deficiency) motivation rather than life-space (self-actualization) motivation operates to influence part-time learners who are Registered Nurses.

In this study, an attempt has been made to ascertain whether relationships existed between DDP and EPS data although no hypothesis testing was undertaken. Results were reported at the $p < .1$, $p < .05$, and $p < .01$ level where appropriate. t-Tests were employed for six

nominal variables in association with factors one through six, and the results are shown in Tables 23-27. Pearson Correlations were computed for ten continuous variables with factors one through six and the results presented in Table 28. One-way analysis of variance was calculated for nine demographic variables comprising groups, associated with factors one through six and the results presented in Tables 29-41.

Factor one, Escape/Stimulation was meaningfully associated with four variables and these were all negative associations. Stated in the positive context, the nurse more likely to be motivated by psychological orientations related to Escape/Stimulation is the unemployed, childless nurse with fewer years of practice and only fairly sure of her intentions to pursue full-time study. The motivation here is thought to be deficiency or life-chance oriented. Conjecture about these findings would suggest that this is likely to be the younger nurse, possibly married but childless, not yet settled in a career pattern and with fewer years of practice, and possibly at a decision-making crossroads in her life, pondering future personal, academic and professional directions. She may be seeking escape from boredom and the stimulation afforded by learning and career possibilities, hence "trying out" the role of university student. Both Sheehy (1976) and Houle (1969) described such activities characteristic of early adulthood through thirty. Sound accessible academic counselling with information related to professional trends and developments might be most useful to this enrollee. Such information is presently available to interested individuals in Edmonton, by appointment, at the Faculty of Nursing,

University of Alberta. A well advertised extension of this service to outlying geographic areas of Central and Northern Alberta on an annual or semi-annual basis might be useful to enrollees outside the large urban center since need for information about "the system" is seen as necessary for adult learners (OISE, 1975:25,27; Kurland, 1976:254-262; Skelhorne, 1975:31-37).

Factor two, identified as Social Concern and accounting for 23.7 percent of variance was meaningfully associated negatively with RN examination scores and positively associated with enrollees in staff nurse positions wishing to enroll in 1979-1980 who believe professional nurses do need a baccalaureate degree. These findings would suggest that high scorers on RN examinations are less motivated by psychological orientations related to Social Concern than lower scorers. The psychological orientation underlying Social Concern is believed to be life-space or self-actualization oriented. If Social Concern is seen as desirable in full-time enrollees, then argument can be made for the selection for admission of staff nurses seeking immediate enrollment in the post-RN program who believe professional nurses do need a baccalaureate degree. High RN scores would not be a useful criteria for admission where Social Concern is a desired underlying motivational orientation.

Factor three, Cognitive Interest, accounted for 15.4 percent of variance and is believed to be life-space or self-actualization oriented. Findings suggest that nurses desiring to obtain a BScN are motivated by orientations other than those measured on this factor scale. Those not having a degree as their goal are more likely

enrolled "for the joy of learning." Those fairly sure of seeking admission within five years and seeking to change field of practice showed higher means associated with this factor. Although this was the only factor with which high RN examination scores were positively associated, the relationships were all extremely weak and could not be considered meaningful. Other positive factor intercorrelations with Cognitive Interest included Escape/Stimulation ($p < .01$), Social Concern ($p < .05$) and Social Relationships ($p < .05$). External Expectations was negatively correlated ($p < .05$). The nurse motivated to learn "just for the joy of learning" responds negatively it seems to the idea of compliance "to comply with the instructions of someone else" (External Expectations factor scale item), or competitiveness "to keep up with competition" (Professional Advancement Scale item). It is regretable that Cognitive Interest motivation is primarily operative for non-degree seeking enrollees rather than those whose goal is the BScN. Considerable effort will have to be directed towards facilitating the growth, in degree seeking nurses, of motivation related to Cognitive Interest, if they are to achieve the scholarly behavior expected as a program outcome of the BScN program at the University of Alberta Faculty of Nursing, and if in the future they are to engage in the kind of self-directed learning necessary to maintain their knowledge base in the fast-changing health care field. Teaching learning processes which facilitate self-directed learning will need to be explored and implemented towards that end.

Factor four, Professional Advancement (accounting for 10.8 percent of variance) and seen as either life-chance or life-space

oriented, was meaningfully associated with six DDP variables as well as RN examination scores. From the findings, an enrollee motivated by psychological orientations related to Professional Advancement could be described as follows: a staff or head nurse-supervisor, studying part-time at University of Alberta and very sure about wishing to enroll in that same university full-time in 1979-1980 and seeking more satisfactory or challenging work as the major outcome of obtaining a BScN. High RN examination scores were meaningfully associated negatively with Professional Advancement motivation, therefore high scorers on RN examinations are not motivated by psychological orientations underlying the Professional Advancement factor. It seems likely that staff nurses motivated by psychological orientations underlying the Professional Advancement factor may also be motivated by the orientations underlying the Social Concern factor since a positive correlation ($p < .01$) existed between the two factors (Table 22). Those studying for reasons such as "to increase my job competence" (Professional Advancement factor item) may also be responding to "to comply with the suggestions of someone else" (External Expectations factor item), since a correlation ($p < .01$) exists between these factors. Similarly, "to improve my social relationships" (Social Relationships factor item) showed a correlation ($p < .01$) with Professional Advancement and indeed, social climate could improve for the staff nurse or head nurse who complies with suggestions to study in order to increase her job competence, or for promotion. A negative correlation with Escape/Stimulation ($p < .05$) might suggest that in responding to external pressures,

the individual sees the learning as 'required' rather than pleasurable or stimulating. This conjecture is supported by the negative correlation between External Expectations and the Cognitive Interest factor ($p < .1$).

Factor five, Social Relationships, accounted for 7.6 percent of the variance. Increasing years of practice was correlated negatively with this factor ($p < .1$). Nurses who have practised for a number of years have doubtless established friendships and social patterns and do not approach university courses "to make new friends" (Social Relationships factor scale item). High RN examination scores were negatively correlated with Factor five indicating that high RN examination scorers do not respond to the motivation reflected by this scale. These enrollees would be less likely to participate in social or student activities.

Factor six, External Expectations, was associated meaningfully with six DDP variables as well as RN examination scores. Based on these associations, the following picture emerges: the enrollee motivated by a psychological orientation related to External Expectations is likely to be a head nurse or supervisor, desiring enrollment at the University of Alberta, with increasing years of practice, however, the older she gets, the less likely the external expectations will influence her decision to study. The higher her score on RN examinations the less likely she is to respond to this motivation. If the enrollee does respond to external expectations she is not motivated by Cognitive Interest (negative correlation $p < .05$), but may respond to motivation related to Professional Advancement ($p < .01$), and Social Relationships ($p < .01$).

The evidence that high RN examination scores show a negative correlation with all factors but the Cognitive Interest scale is of special interest. This finding would seem to suggest that high scorers deny the psychological orientations reflected by these factors, particularly the Professional Advancement factor (negative correlation $p < .01$ for each exam). It is possible that these enrollees are highly confident of their own abilities (particularly the high scorers on surgical nursing) and are seeking greater self-actualization (life-space motivation) through learning. If high RN scores continue to be among the criteria for admission to the post-RN baccalaureate program, then teaching-learning strategies to challenge the cognitive interest and to facilitate maximum self-actualization are necessary. Such strategies might include flexibility in options, courses allowing maximum use and extension of the student's clinical knowledge, courses developed with optional modules for individual interest and the use of contract learning. Consideration might also be given to abandoning the high RN examination score as a criterion for admission in order to attempt to tap a pool of individuals with different motivational orientation. Motivation positively related to Social Concern or Professional Advancement might be more desirable in a group of aspiring health care professionals. While across the sample, life-chance motivation seemed the major underlying psychological orientation, the peculiar emergence of high RN examination scores negatively correlated with all but the Cognitive Interest factor suggests that some considerable conflict between life-chance and life-space motivation may exist for

this group of adult learners. For the age group 35 to 40 years this conflict might reflect the "adolescence of adulthood" discussed by Houle (1969).

Both the Demographic Data Profile and the Education Participation Scale elicited data as planned about the learners in this study and their motivation. While no definitive relationships emerged between the demographic variables and the motivational variables, further studies of aspiring post-RN baccalaureate learners might help to clarify patterns suggested here.

Boshier (1977:90) has spoken to the need to achieve congruence between the program and the learner, while Morstain and Smart (1977: 677) have recommended the EPS as a tool to use with individuals to determine underlying motivation in order to "fit the program to the learner." If we accept Tough's suggestion (1978:2) that adults are astute in identifying their learning needs, and if we can design strategies to meet these needs, then life-chance or "deficiency" oriented learners should experience the kind of rewards that will move them closer to self-actualization, while the life-space or "growth" oriented learners will find increasing satisfaction in their educational experiences. Internalization of the professional role of nursing, discussed by Wooley (1978:103-108), will be facilitated by this learning environment.

Chapter 6

CONCLUSIONS AND RECOMMENDATIONS

In this study, an effort was made to identify demographic and motivational characteristics of two groups of Registered Nurses who were part-time learners at two Alberta universities between July 1, 1977 and June 30, 1978. The conclusions presented below answer the questions posed in Chapter 1 of this study.

SELECTED CHARACTERISTICS OF REGISTERED NURSES ENROLLED IN PART-TIME STUDY

Demographic Characteristics

- Two-thirds of the enrollees are married.
- Three-quarters of the enrollees live in Edmonton or within a fifty mile radius thereof.
- One-quarter live elsewhere in Alberta or beyond.
- Three-quarters have no dependents.
- Half are employed full-time while studying.
- Eighty-two percent are between 21 and 40 years of age with the mean age 33 years.

Professional Characteristics

- Two-thirds of the enrollees are staff nurses.
- Years of practice in nursing average seven.
- One-third believe professional nurses do need a baccalaureate degree.

• Seventeen percent believe nurses do not need a baccalaureate degree.

• Half of the enrollees checked responses related to need for the degree (government will soon require, AARN will soon require, degree only necessary for teaching and supervision and public health) which suggests that clarification of these issues might be helpful to potential students.

• Many written comments were made by respondents related to beliefs about the need for the professional nurse to have a BScN degree and about the whole system of nursing education.

Academic Characteristics

• Eighty-eight percent of enrollees graduated from hospital diploma schools.

• Half the enrollees graduated in or since 1968.

• Forty-five percent of the enrollees have completed some university courses since 1974.

• Course-takers report "Psychology" the most often completed course, with "Sociology" second in frequency of completion.

Aspirations

• Eighty-two percent (n = 93) of part-time students seeking a BScN wish to enroll at University of Alberta.

• Thirty-seven percent of enrollees perceive more challenging or satisfying work to be the major outcome for them of obtaining a BScN.

• Thirty-six percent of enrollees perceive changing their field of practice to be the major outcome for them of obtaining a

BScN degree.

(These latter two aspirations are congruent with the two major motivating factors which emerged as seen below: Escape/ Stimulation and Social Concern.)

Motivation

• Escape/Stimulation (life-chance motivation) is the most important motivational factor for these part-time students.

• Social Concern (life-space motivation) is the second most important motivational factor.

• Cognitive Interest, Professional Advancement, Social Relationships and External Expectations emerged as lesser motivating factors for this sample.

Comparison of Motivation with Other Adult Learners

• The EPS scale reliability is high. The pattern of motivation emerging from Registered Nurse respondents to the scale was similar to response patterns emerging when the scale was used with other groups of adult learners.

Relationship Between DDP and EPS Findings

• RN examination scores and commitment to enroll were variables meaningfully associated with four factors.

• Position while employed, plans for enrollment and years of practice were meaningfully associated with three factors.

• Other DDP variables were meaningfully associated with only one or two factors.

RECOMMENDATIONS

The recommendations which follow are based on the results of the study, outlined above and described in detail in Chapter 4; and the review of literature presented in Chapter 2. While some of the recommendations would require budgetary resources and institutional policy change, other recommendations are within the realm of possibility in the present post-RN program.

Accessibility

1. Expand enrollment in the post-RN program. The part-time learners are potential candidates for the post-RN program. Eighty-two percent wish to enroll at the University of Alberta in the future as determined by this study.

2. Develop off-campus courses to meet the needs of learners in geographic areas beyond urban Edmonton.

3. Develop flexibile scheduling—evening courses, Spring and Summer sessions. Consider integration of day and evening, part-time and full-time learners to meet the needs of the working part-time learners and decrease their isolation.

Individual respondents indicated a need for off-campus courses and flexible scheduling and the literature of adult education supports the need for such flexibility and decentralization (Kurland, 1977; Monroe, 1975; Faure, 1972).

4. Continue co-operation with Athabasca University in course planning, particularly for distance learning. The substantial number of respondents enrolled at Athabasca University and intending to

pursue a BScN supports this recommendation.

5. Develop varied delivery modes, e.g., self-directed learning with visiting tutor, contract learning, and joint appointments to utilize clinical expertise. The literature on post-RN baccalaureate programs supports this recommendation (Squaires and Hinsvark, 1975).

6. Reconsider the present requirement for an intramural year. Comments of respondents indicate that the intramural year is seen by many part-time learners as an obstacle to completion of the BScN. The literature on adult education and nursing suggests removal of such institutional barriers to completion of a degree (Kurland, 1977; Squaires and Hinsvark, 1975; OISE, 1975).

Information Giving

7. Continue the present information sessions presented for potential students by the Faculty of Nursing, University of Alberta. Include both academic program information and professional trends to counteract misunderstandings evidenced by the questionnaire responses and the written comments of the enrollees.

8. Organize similar off-campus information sessions in selected geographic areas to accommodate rural and isolated learners. Where distance is formidable (e.g., Northwest Territories) use telephone conference or videocassette. Involve Athabasca University in information sessions.

9. Use professional journals as appropriate, e.g., Newsletter of AARN, for regular information presentations related to the post-RN programs available. The literature suggests that the adult learner

is assisted by information related to the unfamiliar and sometimes threatening 'system' of post-secondary education (Kurland, 1977; Skelhorne, 1975).

10. Promote action among both employers and employees toward paid educational leave. The Canadian Nurses Association has recently made specific recommendations to the Commission of Enquiry on Educational Leave and Productivity (Canadian Nurse, 1979:14) with regard to the need for labor-management policies on paid educational leave for nurses.

Criteria for Admission

11. Reconsider the use of RN examination scores as a criterion for admission in order to achieve a different motivational orientation in the learning group. This recommendation emerges from the negative association of all RN scores in this study with five of six motivational factors.

12. On admission, identify student's motivation through use of EPS. (Data could become part of an ongoing research project into learner motivation over time.) The EPS shows reliability in identifying learner motivation and results could assist the learner and teacher to tailor a program to individual needs (Knowles, 1973; Morstain and Smart, 1977).

13. Recognize the implications for learning inherent in the EPS results as suggested in this study, e.g., the staff nurse who believes that a BScN is necessary for professional practice, who is seeking immediate admission and is committed to her decision may be more motivated by Social Concern than other individuals. Relationships

between motivational priorities and demographic variables are identified in this study.

Teaching-Learning Process

14. Principles of Androgogy (adult education) should be the foundation for curriculum development and course planning in the post-RN program (Knowles, 1973; Rosendahl, 1974).

15. Facilitate maximum self-actualization for high RN scorers (closest motivating factor was Cognitive Interest):

- self-directed learning
- contract learning
- optional modules within required courses,

as identified in this study.

16. Assist students to identify their own learning needs in relation to their motivation (Knowles, 1973; Morstain and Smart, 1977; Tough, 1971).

17. Develop strategies to facilitate the growth of Cognitive Interest motivation so that BScN seekers will achieve the scholarly outcomes expected of the baccalaureate graduate. BScN seekers were motivated by orientations other than Cognitive Interest in this study. A love of learning and an inquiring mind could be considered necessary for continued professional growth and future self-directed learning.

The above recommendations all require some considerations of change in delivery of programs and educational services. Flexibility is desirable and innovation is necessary to meet the changing educational demands, nevertheless, in discussing program development,

availability and distribution, a publication of the Centre for Educational Research and Innovation reminds us that ". . . proliferation is often a forerunner of instability and it is essential that existing facilities should be drawn upon as far as possible as a base for coherent innovation" (OECD, 1975:32).

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APPENDICES

APPENDIX I

QUESTIONNAIRE

DEMOGRAPHIC DATA PROFILE
EDUCATION PARTICIPATION SCALE

DEMOGRAPHIC DATA PROFILE

These questions ask for personal information from you, related to the year 1977-78. Your replies will be held in strictest confidence. Your name is not required. Please answer by placing an X in the box beside your choice, or by providing a written response as indicated. Please think back to the period 1977-78 when you were taking university course work.

Do not WRITE IN THIS SPACE

INST. 1
Resp. 2
Code 3,4,5

1. Sex
   1 ☐ female
   2 ☐ male

6

2. Marital status when you took your course
   1 ☐ single
   2 ☐ married
   3 ☐ other (e.g., separated, divorced, widowed)

7

3. Please write your age in 1977-78 _____

8,9

4. Place of residence in 1977-78
   1 ☐ City of Edmonton
   2 ☐ Within 50 mile radius of Edmonton
   3 ☐ Other Alberta North of Red Deer
   4 ☐ Other Alberta South of Red Deer
   5 ☐ Outside of Alberta

10

5. How were you supported financially while taking university courses?
   1 ☐ through part-time employment
   2 ☐ through full-time employment
   3 ☐ through loans, savings, etc.
   4 ☐ family support
   5 ☐ combination of the above

11

6. How many children were financially dependent on you (e.g. as you indicated on your tax return)?
   1 ☐ none
   2 ☐ one child
   3 ☐ two children
   4 ☐ three or more children

12

7. How many adults were financially dependent on you (e.g., as you indicated on your tax return)?
   1 ☐ self only
   2 ☐ one other adult
   3 ☐ two other adults
   4 ☐ three or more other adults

13

DEMOGRAPHIC DATA PROFILE

8. What was your initial educational preparation in nursing?

1 ☐ hospital diploma program
2 ☐ diploma program in a college or technical institute
3 ☐ other (please specify) _____ 14

9. What year did you graduate? (please write the year) ____ 15,16

10. What were your scores on R.N. exams? (R.N. scores are available from the A.A.R.N. on your written request). Check the range closest to your scores.

	350-399 (1)	400-499 (2)	450-499 (3)	500-549 (4)	550-599 (5)	600-649 (6)	650+ (7)	
1. Medical Nursing								17
2. Surgical Nursing								18
3. Nsg. of Children								19
4. Obstetric Nursing								20
5. Psychiatric Nsg.								21

6. Was a different scoring system used? Please specify _____ 22

11. Have you completed any additional university education in either nursing or non-nursing subjects since 1974?

1 ☐ no
2 ☐ yes (please specify) _____ 23

12. How many years have you been in active practice as a Registered Nurse?
please write _____ years. 24,25

13. Were you employed as a Registered Nurse while taking a course in 1977-78?

1 ☐ yes
2 ☐ no (if no, skip to question #16) 26

14. What was your employment status in nursing while you were taking a course in 1977-78?

1 ☐ full time in nursing
2 ☐ part time in nursing
3 ☐ not employed in nursing 27

15. What was the title of your position while you were taking your course in 1977-78?

1 ☐ staff nurse
2 ☐ head nurse or assistant head nurse
3 ☐ supervisor
4 ☐ other please specify _____ 28

DEMOGRAPHIC DATA PROFILE

16. Is it your wish to complete requirements for a baccalaureate degree in nursing?

1 ☐ yes
2 ☐ no (if your answer is no, skip to Question 21) 29

17. If your answer to 16 is yes, then when do you wish to enroll full-time in order to complete your studies towards a baccalaureate degree?

1 ☐ presently enrolled
2 ☐ 1979-80
3 ☐ within 3 years time
4 ☐ within 5 years time
5 ☐ other (please specify) _____ 30

18. How sure can you be about your commitment to enroll full-time in study towards a baccalaureate degree:

1 ☐ very sure
2 ☐ fairly sure
3 ☐ unsure 31

19. In Alberta, Post-R.N. baccalaureate programs are available at University of Alberta and University of Calgary. Where do you wish to enroll full-time in order to complete your studies towards a baccalaureate degree?

1 ☐ University of Calgary
2 ☐ University of Alberta
3 ☐ Other (please specify) _____ 32

20. What do you believe will be the major outcome for you, of completing a baccalaureate degree? (choose one reply)

1 ☐ improved working conditions (better hours, days off etc.)
2 ☐ improved salary
3 ☐ more challenging or satisfying work
4 ☐ opportunity to change field of practice
5 ☐ personal satisfaction in having a degree. 33

21. Nurses hold different beliefs about having a baccalaureate degree. What do you believe? (Choose one reply)

1 ☐ professional nurses do not need a baccalaureate degree
2 ☐ the government will soon require all nurses to have a degree
3 ☐ professional nurses do need a baccalaureate degree
4 ☐ the A.A.R.N. will soon require all nurses to have a degree
5 ☐ only nurses working in teaching or supervision or public health require a baccalaureate degree. 34

Are there any comments you would like to make?

Thank you for completing this questionnaire.

CONFIDENTIAL

Education Participation Scale

Think back to when you enrolled for your university course in 1977-78 and indicate the extent to which each of the reasons listed below influenced you to participate.

Circle the category which best reflects the extent to which each reason influenced you to enrol.

There are 40 reasons listed. Circle one category for each reason.

Sometimes the "Much influence" category is on the right-hand side of the page, sometimes it is on the left.

No reason for enrolling is any more or less desirable than any other reason. Please be frank. There are no right or wrong answers.

START HERE:

1.	To seek knowledge for its own sake	Much influence	Moderate influence	Little influence	No influence
2.	To share a common interest with my spouse or friend	No influence	Little influence	Moderate influence	Much influence
3.	To secure professional advancement	Much influence	Moderate influence	Little influence	No influence
4.	To become more effective as a citizen	No influence	Little influence	Moderate influence	Much influence
5.	To get relief from boredom	Much influence	Moderate influence	Little influence	No influence
6.	To carry out the recommendation of some authority	No influence	Little influence	Moderate influence	Much influence
7.	To satisfy an enquiring mind	Much influence	Moderate influence	Little influence	No influence
8.	To overcome the frustration of day to day living	No influence	Little influence	Moderate influence	Much influence

TO WHAT EXTENT DID THESE REASONS INFLUENCE YOU TO ENROL IN YOUR UNIVERSITY COURSE?

9.	To be accepted by others	Much influence	Moderate influence	Little influence	No influence
10.	To give me higher status in my job	No influence	Little influence	Moderate influence	Much influence
11.	To supplement a narrow previous education	Much influence	Moderate influence	Little influence	No influence
12.	To stop myself becoming a "vegetable"	No influence	Little influence	Moderate influence	Much influence
13.	To acquire knowledge to help with other educational courses	Much influence	Moderate influence	Little influence	No influence
14.	To fulfil a need for personal associations and friendships	No influence	Little influence	Moderate influence	Much influence
15.	To keep up with competition	Much influence	Moderate influence	Little influence	No influence
16.	To escape the intellectual narrowness of my occupation	No influence	Little influence	Moderate influence	Much influence
17.	To participate in group activity	Much influence	Moderate influence	Little influence	No influence
18.	To increase my job competence	No influence	Little influence	Moderate influence	Much influence
19.	To gain insight into my personal problems	Much influence	Moderate influence	Little influence	No influence

TO WHAT EXTENT DID THESE REASONS INFLUENCE YOU TO ENROL IN YOUR UNIVERSITY COURSE?

20.	To help me earn a degree, diploma or certificate	No influence	Little influence	Moderate influence	Much influence
21.	To escape television	Much influence	Moderate influence	Little influence	No influence
22.	To prepare for community service	No influence	Little influence	Moderate influence	Much influence
23.	To gain insight into human relations	Much influence	Moderate influence	Little influence	No influence
24.	To have a few hours away from responsibilities	No influence	Little influence	Moderate influence	Much influence
25.	To learn just for the joy of learning	Much influence	Moderate influence	Little influence	No influence
26.	To become acquainted with congenial people	No influence	Little influence	Moderate influence	Much influence
27.	To provide a contrast to the rest of my life	Much influence	Moderate influence	Little influence	No influence
28.	To get a break in the routine of home or work	No influence	Little influence	Moderate influence	Much influence
29.	To improve my ability to serve	Much influence	Moderate influence	Little influence	No influence
30.	To keep up with others	No influence	Little influence	Moderate influence	Much influence
31.	To improve my social relationships	Much influence	Moderate influence	Little influence	No influence

TO WHAT EXTENT DID THESE REASONS INFLUENCE YOU TO ENROL IN YOUR UNIVERSITY COURSE?

32.	To meet formal requirements	No influence	Little influence	Moderate influence	Much influence
33.	To maintain or improve my social position	Much influence	Moderate influence	Little influence	No influence
34.	To escape an unhappy relationship	No influence	Little influence	Moderate influence	Much influence
35.	To provide a contrast to my previous education	Much influence	Moderate influence	Little influence	No influence
36.	To comply with the suggestions of someone else	No influence	Little influence	Moderate influence	Much influence
37.	To learn just for the sake of learning	Much influence	Moderate influence	Little influence	No influence
38.	To make new friends	No influence	Little influence	Moderate influence	Much influence
39.	To improve my ability to participate in community work	Much influence	Moderate influence	Little influence	No influence
40.	To comply with instructions from someone else	No influence	Little influence	Moderate influence	Much influence

THANK YOU for completing this questionnaire!

APPENDIX II

COVERING LETTER ACCOMPANYING MAILED QUESTIONNAIRE

THE UNIVERSITY OF ALBERTA

FACULTY OF NURSING

CLINICAL SCIENCES BUILDING
EDMONTON, CANADA T6G 2G3

January 22, 1979

Dear Fellow Nurse:

We are asking you to help us with a study about Registered Nurses. The purpose of this questionnaire is to help the Faculty of Nursing, University of Alberta, to learn more about Registered Nurses who have been taking university courses on a part-time basis.

Courses can be made more accessible and relevant when the needs of the learners are known and considered.

Program planning is more successful when the characteristics of the learners are known.

Will you help?

A questionnaire in two parts is enclosed. One part is a Demographic Data Profile which asks for personal information. The second part is an Education Participation Scale which asks you to think about your reasons for taking university courses.

We ask you to complete both parts and return in the envelope provided. All information will be handled in confidence. Your name is not required.

Thank you for assisting us with this study.

Winnifred C. Mills R.N., B.Sc.N.

(investigator for Special Student project)

APPENDIX III

PROMPT LETTER SENT TO RESPONDENTS TWO WEEKS FOLLOWING THE MAILED QUESTIONNAIRE

THE UNIVERSITY OF ALBERTA

FACULTY OF NURSING

CLINICAL SCIENCES BUILDING
EDMONTON, CANADA T6G 2G3

February 12, 1979

Dear Fellow Nurse:

In January we sent you a questionnaire asking you to tell us why you took university courses during 1977-78, and your future educational plans.

We believe that this information will contribute to successful program planning. You may have already completed and returned the questionnaire - if so we thank you and we ask you to disregard the request in this letter.

If you have not returned it, please help us. Just complete the questionnaire (two parts) and mail in the stamped envelope provided.

All information will be handled in confidence. Your name is not required.

Thank you for assisting us with this study,

Yours sincerely,

Winnifred C. Mills R.N., B.Sc.N.

(investigator for Special Student project)

APPENDIX IV

VERBATIM COMMENTS AS MADE ON DEMOGRAPHIC DATA PROFILE

GENERAL COMMENTS WRITTEN IN SPACE PROVIDED ON THE DEMOGRAPHIC DATA PROFILE

General Comments

I would like to be able to take at least some of the nursing courses on a part-time basis.

All aspects of nursing must be elevated to meet the needs of todays population.

When one is required to work full time, participate in a planning project and have a degree at the end of the planning period when the new plan is installed—how? when?

There should be more openings for nurses to take Post-R.N. Baccalaureate programs.

I hope to become a full time student within the faculty from my present status as Special Student. It would be nice if Nursing courses could be made available in the Spring and Summer sessions for special students.

I do not believe a degree should be compulsory for I feel there is a place for both degree and non-degree people in our profession.

I believe university preparation is necessary if nurses wish to be categorized as "professional" but the paradox is that provisions for nurses to attain that end are sadly lacking, i.e., quotas for Post-Basic enrollment, few or no evening nursing courses being offered.

Have not found nurses with degree are any better when it comes to general duty nursing.

Nursing as a profession should have a NATIONAL standard of education including two years of university and two years of hospital and community training.

I feel all nurses should take courses to enlarge their knowledge, therefore become a person who takes pride in their profession—learning always enhances a person's satisfaction of work.

I would like to see the enrollment for the Post-Basic R.N. program increased so that the people who want to go back and get their degree are able to. With only 72 applicants accepted I'm sure that leaves MANY R.N.'s waiting to get accepted and often many things and people depend on whether you're accepted or not.

I found it extremely difficult to choose a course to take in the evening—the list of approved options is helpful—except, not one of these courses was offered in evening. That makes one very discouraged and could be enough to change a person's mind about further education.

I feel that there should be more opportunity and incentive to complete B.Sc. e.g., financial, but I feel for bedside nursing it is not necessary.

I feel more of the behavioral/managerial sciences could be included in the Basic R.N. program, thus supervisors and teachers especially would be prepared for their speciality, and any further learning they require would be in their own direction.

Many graduates of the Baccalaureate degree I have found to be quite poor in clinical work—i.e., good in theory but not in actual practice.

I feel my gain in knowledge by obtaining my degree will not improve my performance on the job.

The requirement for full time study limits number of nurses able to complete the requirement. More rapid upgrading is needed for those already in the work force before insisting on B.Sc. for all nurses. Also more loans and bursaries or grants are needed for those required to leave the work force.

I would like to see more courses available for nurses in outlying areas; especially the nursing courses. Or have degree programs available at smaller universities and colleges for easier access for "small towns."

Nurses in a hospital setting require more knowledge in which they work. (Speaking from only having a diploma.) Three years of nursing was just an orientation but I'm not sure a degree truly prepares an individual to cope in an acute working situation. Nurses like doctors must (be) specialized in a particular field to cope, provide good nursing care and instruct their patients properly.

Due to the inflexibility in the Nursing Faculty (U of A) with regard to scheduling evening credit etc., I am enrolled in another faculty and will have completed degree requirements Spring '79.

I believe nurses employed as DON or administration, teaching, should have a baccalaureate degree. Courses here are offered for teachers even if there are only 6 enrolled. In nurses' courses (Philosophy of Religion) we had 8 nurses and couldn't get the course. It is difficult to get your B.Sc. in Nursing if courses for nurses 70 miles away from Edmonton are not

offered in our community or close to our community. I'm unable to travel 70 miles to take a course.

Degree program should follow completion of three year hospital based program to ensure enough experiences in practical nursing. Theoretical knowledge alone is not enough.

I believe that a B.Sc.N. degree would be helpful to most nurses working either in hospital or in the community in order to advance in their field of choice.

I don't believe all nurses require a B.Sc.N. to be a professional nurse; although in order to expand or change field of practice I can understand the advantage of such a degree; or more specifically the courses required to obtain the degree.

I am no longer employed in the nursing field. I am a full time student at NAIT in the Business Administration program. I definitely feel it is not necessary to have a B.Sc. in order to work as a staff nurse in a general hospital in most areas. Hiring a B.Sc. for general duty (in the present confines of a hospital today) is not really fulfilling for the R.N. and she often lacks the competence and organization of a diploma graduate as far as bedside care is concerned.

In doing general duty I do not see the need for a baccalaureate degree.

You ask re financial dependents and in my case as in many others there is only myself, but there are 4 who are emotionally dependent on my person and to "leave home" for a couple of years is obviously out of the question—thousands of us are in the same position if you live out of a city.

Nursing can only be improved by requiring more education of its members—be this a degree or a required number of hours of inservice education per year.

Baccalaureate degree is important but should offer more practical application subjects, also, course credit could be given for experience before university.

I have now gained the impression that the B.Sc. program is a status symbol. It contains too much irrelevant material and many would derive most benefit from obtaining courses more suited to their positions.

I'm not motivated to get my degree because I am presently occupying a position with the hours, wages and challenges that a degree nurse would hope to get.

It probably would be beneficial if the universities would commence some evening courses in Nursing. I'm sure this would enable more people to work and study at the same time.

A lot of nurses are unable due to financial or family commitments to attend University for a set period of time. I feel nurses should upgrade themselves through courses and inservice.

I am interested in a B.S.N. only as a way of taking a Master's degree in Care of the Dying.

There are too few evening courses offered toward this end. Hospitals don't encourage one to get a degree. Salary compensation is too little incentive.

I believe a baccalaureate will be beneficial in many areas but it is not absolutely necessary therefore should not be made mandatory. It should be made more accessible to take for those nurses working full or part-time (less rigid rules) and thus would look more attractive to more nurses. The faculty does not make it particularly easy to acquire a degree—no nursing courses can be taken part-time or at Athabasca University. I also believe that nursing should be concerned with the family unit and this seems often disregarded when working with students that have family commitments they have to be concerned about. If they cannot consider the "nurse-mother" too, are they not contradicting much they are trying to teach the nurse?

No nurse should be allowed to take a B.Sc. unless she has at least 2-3 years general duty experience.

If one works full time there is no way you can adequately participate in a university course or courses. It is too time consuming and difficult to cope with. I wish there was some other way to do it.

The baccalaureate course I'm presently enrolled in is not making me a more expert nurse, nor adding to my nursing skills. On graduation, I won't be any more qualified to teach, administer or nurse in the public health situation than I was when I started my program—only my nursing skills will be rustier. I'm very disappointed. However, if the powers that be insist on that degree certificate, then I'll get it, to improve my chances for a decent job.

I think nurses should always be striving for higher education but I don't think baccalaureate degree is the answer for everyone.

I feel a baccalaureate degree gives broader concepts of nursing, helping one develop skeptical but progressive attitudes. Along with these attitudes it offers the knowledge and guidelines to make beneficial amendments; preventing stagnation of nurses and nursing.

A B.Sc.N. does not a good nurse make!

Degree nurses do not have near the hospital experience they should have.

There's no substitute for training. All the theory in the world doesn't give you that.

Nurses holding their degree are poorly prepared for general active nursing. Three years practical are required at least before they are relatively competent.

If baccalaureate degree was made compulsory I think most nurses would make an effort to obtain this rather than quit nursing.

A broad progressive attitude is necessary. I'm for communication and understanding—some have it without the degree. I would want it mostly only to open more doors.

It is not feasible at this time to expect all nurses to have baccalaureates. As yet, I'm not convinced that having a baccalaureate makes a better bedside nurse. The most qualified is the Clinical Specialist and she's prepared at the Master's level.

I find it frustrating that I can't take a university course with an instructor. Athabasca courses are time consuming and I experience delays because of poor mail service.

I left the B.Sc. program because I felt it was too general. I was very interested in teaching and felt the program as now offered was not adequate to prepare me for the position.

I feel experience takes priority rather than a degree behind your name. In my experience B.Sc. nurses have found much difficulty relating to patients at the bedside and are very textbook orientated. I find it an honor to be able to attend the University as a whole, but strongly feel that experience is a much higher priority than a degree. I am very concerned about where our nursing is going to. And where are we going to find the very understanding nurse at the bedside who really cares about her patients and delivers a high quality of nursing care? Nurses who receive their degrees will certainly not be interested in the bedside nursing and shift work that nursing requires. Who will be at the bedside?

Nurses don't need a degree to be effective nurses—they do need the challenge of learning and thinking through new ideas to remain effective in their work.

I feel R.N.'s are the one profession who are penalized for having a family. Since I cannot get enough part-time daytime work as an R.N. in my home community, I have been forced to take non-nursing jobs. My family comes first and I will not forfeit family life for the sake of a career, however I do hate to lose my license because of inflexible working hours for married women.

Very difficult for nurses living in areas outside to take courses. Only course offered in Whitehorse presently is English (Shakespeare). I took Sociology of Poverty fall of 1976. Tried Ecology from Athabasca in 1977 but withdrew due to distance and expense involved when contacting tutor in Edmonton.

I feel there is far too much emphasis on baccalaureate degrees at the moment and not enough emphasis on the art of nursing.

All of marks, high school, school of nursing . . . forwarded to U of A Faculty of Nursing Spring 1978. Due to omission of RN results with other marks, admission denied.

I feel nursing is becoming a very specialized field and with my baccalaureate degree would specialize in a certain area.

I think a B.Sc.N. in Nursing is important because we are expected to do a lot of teaching and it is important we know how to teach effectively.

Two year program—some RNs are excellent knowledgeable nurses—have confidence and experience in assessing situations and setting priorities—BUT I did not feel that way.

Possibly instead of B.Sc. in nursing, a nurse should have a diploma course in her specialty, e.g., orthopedics, O.R.

To hold a baccalaureate degree would mean a wide field of practice. This to me means a challenge. I am presently employed by the _____Health Unit (P.H.N.) and enjoying the experience, but would like to teach in the future.

These areas [supervision, public health] are almost completely closed to nurses without a degree.

To encourage nurses to finish their B.Sc. and for (easy) accessibility, nursing subjects or courses should be offered within the hospital or school of nursing compounds. Also courses should be offered part time or full time, morning or evening so nurses can study and get their degree without quitting their jobs.

Any type of learning experience could improve the nursing profession.

Basically, to see if I had the discipline to study after many years without a formal education.

Basically the only reason is that I want to change my occupation from Nursing to Theology.

Comments Relating to Specific Questions

Question 17

Re question 17: when family is grown—18-20 years!

Unsure. Depends how soon courses are available.

Would prefer part-time.

Question 18

Re question 18: Very sure (about commitment to enroll full-time) providing I am able to take a refresher course to obtain active registration. At present it is difficult to be accepted into a refresher program, e.g., U of AH accepted only 14 out of 50 applications to their refresher program (1979—Winter). Also question emphasis of existing Refresher program. Would like to see more emphasis on recent medical advances—procedures, drugs rather than basic bedside care, e.g., bedbaths!

Re question 18: Neither of the above are practical for me.

Question 19

Re question 19: Lakeland College—only thing close in our area.

Question 20

Re question 20: Numbers 3 and 5 were also very important in influencing my decision to go to U of A.

Re question 20: I feel this to be very important in being able to work in different fields.

Question 21

Re question 21: I believe that in the future all nurses will be required to have a B.Sc.N. according to the Alberta Task Force Report.

Further to answer #5 (re question 21), providing they have a good diploma course to prepare R.N.'s.

Re question 21: I also believe #4 in the above question. However, I feel that experience is more pertinent than a degree.

Re question 21: They'd be crazy to suggest it (referring to choice #4 by arrow). As my last year of active nursing was 1970, my competence to answer question 21 in a knowledgeable fashion is quite questionable. I believe 2, 4, 5.